

Figure S1 The survival analysis of different modality of chemoradiotherapy. (A) OS; (B) PFS. OS, overall survival; SCRT, sequential chemoradiotherapy; CCRT, concurrent chemoradiotherapy; PFS, progression-free survival.

Table S1 Characteristics for all patients with and without severe lymphopenia

Characteristics	All (N=215)	Non-SRL (N=165)	SRL (N=50)	P
Gender, n (%)				0.793
Female	34 (15.8)	25 (15.2)	9 (18.0)	
Male	181 (84.2)	140 (84.8)	41 (82.0)	
Age (years), median (SEM)	58.9 (8.97)	58.6 (8.89)	60.0 (9.24)	0.341
ECOG, n (%)				0.768
0	17 (7.9)	14 (8.5)	3 (6.0)	
1 or 2	198 (92.1)	151 (91.5)	47 (94.0)	
Tumor laterality, n (%)				0.426
Left	90 (41.9)	72 (43.6)	18 (36.0)	
Right	125 (58.1)	93 (56.4)	32 (64.0)	
Tumor location, n (%)				0.031
Lower lobe	40 (18.6)	25 (15.2)	15 (30.0)	
Upper + middle lobe	175 (81.4)	140 (84.8)	35 (70.0)	
Pathology				0.466
ADC	83 (38.6)	61 (37.0)	22 (44.0)	
Non-ADC	132 (61.4)	104 (63.0)	28 (56.0)	
TNM, n (%)				0.130
II	17 (7.9)	16 (9.7)	1 (2.0)	
III	198 (92.1)	149 (90.3)	49 (98.0)	
Chemotherapy before RT, n (%)				0.481
No	42 (19.5)	30 (18.2)	12 (24.0)	
Yes	173 (80.5)	135 (81.8)	38 (76.0)	
Concurrent chemotherapy cycles, n (%)				0.003
0	85 (39.5)	74 (44.8)	11 (22.0)	
1–3	102 (47.4)	68 (41.2)	34 (68.0)	
5–6 (weekly)	28 (13.0)	23 (13.9)	5 (10.0)	
Chemotherapy regimen, n (%)				0.504
DP	50 (23.3)	38 (23.0)	12 (24.0)	
GP	15 (7.0)	14 (8.5)	1 (2.0)	
PP	93 (43.3)	70 (42.4)	23 (46.0)	
TP	57 (26.5)	43 (26.1)	14 (28.0)	
PTV (mm ³), median [SEM]	538 [281]	504 [249]	651 [348]	0.007

SRL, severe lymphopenia; ECOG, Eastern Cooperative Oncology Group; ADC, adenocarcinoma; TNM, tumor-node-metastasis; RT, radiotherapy; DP, docetaxel cisplatin/carboplatin; GP, gemcitabine cisplatin/carboplatin; PP, pemetrexed cisplatin/carboplatin; TP, paclitaxel cisplatin/carboplatin; PTV, planning target volume; SEM, standard error of measurement.

Table S2 Univariate and multivariate regression analysis for SRL in CCRT group

Characteristics	Univariate analysis		Multivariate analysis	
	OR (95% CI)	P	OR (95% CI)	P
Gender (female vs. male)	0.646 (0.244–1.711)	0.379		
Age (continuous)	1.011 (0.970–1.054)	0.603		
Tumor laterality (left vs. right)	0.707 (0.326–1.532)	0.380		
Tumor location (upper + middle lobe vs. lower lobe)	0.271 (0.111–0.662)	0.004	0.271 (0.111–0.662)	0.004
Pathology (non-ADC vs. ADC)	0.729 (0.342–1.556)	0.414		
ECOG (0 vs. 1-2)	1.542 (0.306–7.777)	0.600		
TNM (II vs. III)	4.171 (0.510–34.109)	0.183		
Chemotherapy regimen (ref. DP)				
PP	1.181 (0.457–3.053)	0.732		
TP	1.389 (0.505–3.820)	0.525		
PTV (continuous)	1.001 (1.000–1.002)	0.191		

SRL, severe lymphopenia; CCRT, concurrent chemotherapy; ADC, adenocarcinoma; Ref., reference group; DP, docetaxel cisplatin/carboplatin; PP, pemetrexed cisplatin/carboplatin; TP, paclitaxel cisplatin/carboplatin; PTV, planning tumor volume.

Table S3 Univariate and multivariate regression analysis for SRL in SCRT group

Characteristics	Univariate analysis		Multivariate analysis	
	OR (95% CI)	P	OR (95% CI)	P
Gender (female vs. male)	1.935 (0.226–16.559)	0.547		
Age (continuous)	1.056 (0.970–1.149)	0.206		
Tumor laterality (left vs. right)	5.906 (1.193–29.245)	0.030	6.003 (1.000–36.027)	0.050
Tumor location (upper + middle lobe vs. lower lobe)	2.131 (0.250–18.123)	0.489		
Pathology (non-ADC vs. ADC)	0.948 (0.254–3.541)	0.937		
ECOG (0 vs. 1-2)	1.045 (0.116–9.411)	0.969		
TNM (II vs. III)	265,227,246.253 (0–+∞)	>0.99		
Chemotherapy regimen (ref. DP)				
GP	0.310 (0.028–3.364)	0.335		
PP	0.867 (0.187–4.007)	0.855		
TP	0.255 (0.024–2.742)	0.259		
PTV (continuous)	1.004 (1.002–1.007)	0.002	1.004 (1.002–1.007)	0.002

SRL, severe lymphopenia; SCRT, sequential chemo radiotherapy; ADC, adenocarcinoma; Ref., reference group; DP, docetaxel cisplatin/carboplatin; GP, gemcitabine cisplatin/carboplatin; PP, pemetrexed cisplatin/carboplatin; TP, paclitaxel cisplatin/carboplatin; PTV, planning tumor volume.

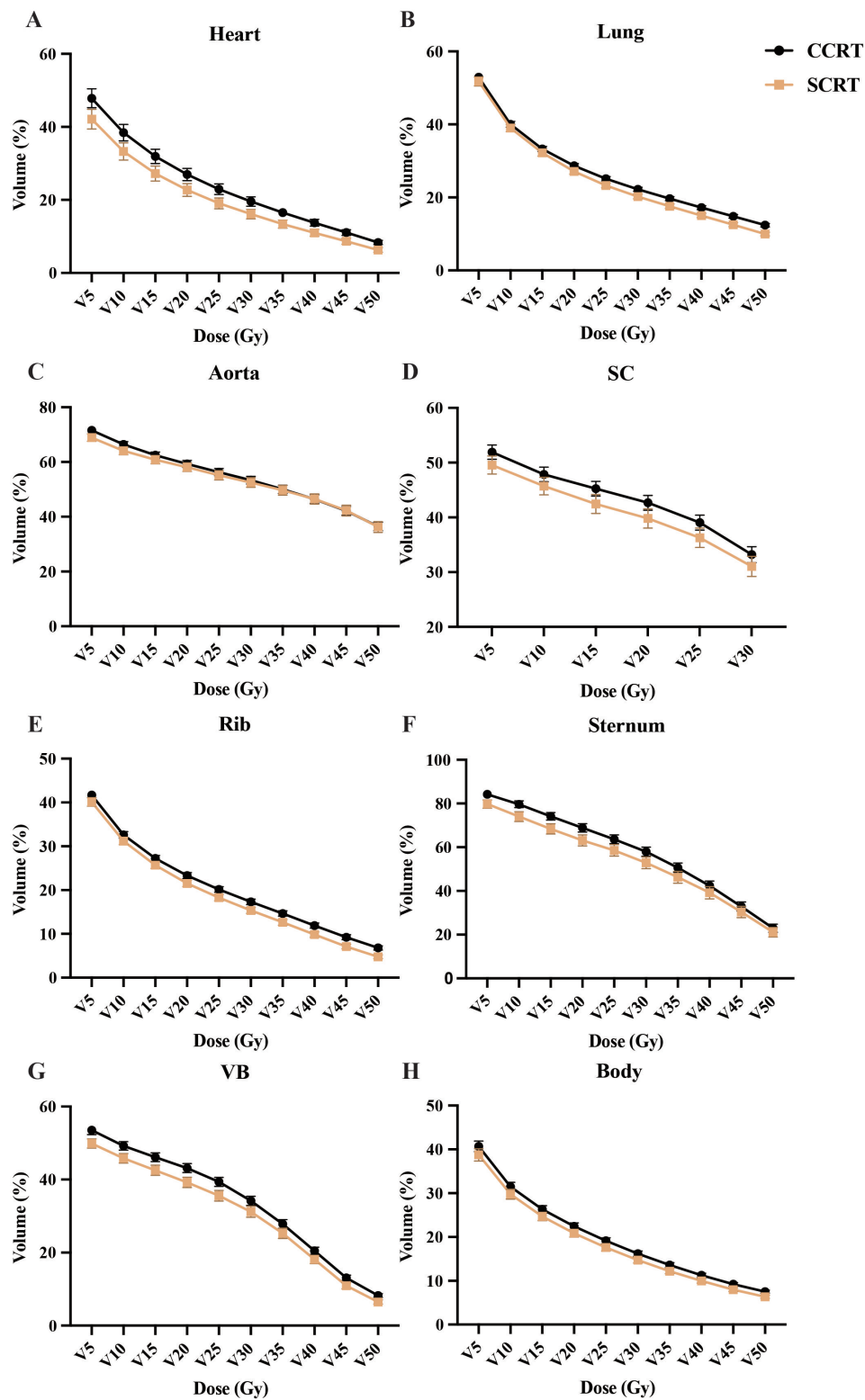


Figure S2 The OARs dose-volume histogram comparison of CCRT and SCRT. (A) Heart; (B) lung; (C) aorta; (D) SC; (E) rib; (F) sternum; (G) VB; (H) body. CCRT, concurrent chemoradiotherapy; SCRT, sequential chemoradiotherapy; SC, spinal cord; VB, vertebra; OARs, organs at risk.