

Supplementary

Table S1 The regimen of chemo-immunotherapy

Systematic treatment	N (%)
Platinum-based chemotherapy	78 (100.0)
Immunotherapy	
Anti-PD-1	32 (41.0)
Anti-PD-L1	44 (56.4)
Anti-PD-1 + anti-PD-L1	2 (2.6)
Immune maintenance therapy	
No	36 (46.2)
Anti-PD-1	14 (17.9)
Anti-PD-L1	27 (34.6)
Anti-PD-1 + anti-PD-L1	1 (1.3)

PD-1, programmed death-1; PD-L1, programmed death ligand-1.

Table S2 Multivariate analysis of IPFS and dPFS for patients treated with chemo-immunotherapy and TRT

Items	IPFS		dPFS	
	HR (95% CI)	P value	HR (95% CI)	P value
Age (≥ 65 vs. < 65 years)	–	–	–	–
Gender (female vs. male)	–	–	–	–
Smoking status (yes vs. no)	–	–	–	–
ECOG-PS (> 1 vs. ≤ 1)	–	–	–	–
Size of primary lesion (≥ 5 vs. < 5 cm)	–	–	–	–
Mediastinal lymph node metastasis (yes vs. no)	–	–	–	–
Primary brain metastasis (yes vs. no)	–	–	–	–
Primary liver metastasis (yes vs. no)	2.74 (1.10–6.83)	0.031	–	0.268
Number of initial distant metastases (≥ 3 vs. < 3)	–	–	1.92 (1.05–3.50)	0.034
Superior vena cava syndrome (yes vs. no)	–	–	–	–
Pleural effusion (yes vs. no)	–	–	–	–
Pericardial effusion (yes vs. no)	–	–	–	–
ICIs				
Anti-PD-1 drugs (yes vs. no)	–	–	–	–
Anti-PD-L1 drugs (yes vs. no)	–	–	–	–
PCI (yes vs. no)	–	–	–	–
Extrathoracic radiotherapy (yes vs. no)	–	–	–	–
Consolidative TRT (yes vs. no)	0.23 (0.11–0.48)	0.000	–	–
Timing of TRT (lately vs. early)	–	–	–	–
Dose of TRT				
Conventional radiotherapy (yes vs. no)	–	–	–	–
Hyperfractionated radiotherapy (yes vs. no)	–	–	–	–
Hypofractionated radiotherapy (yes vs. no)	–	–	–	–
Response to systematic before TRT (CR/PR vs. SD/PD)	–	–	–	–

IPFS, local progression-free survival; dPFS, distant progression-free survival; TRT, thoracic radiotherapy; HR, hazard ratio; CI, confidence interval; ECOG PS, Eastern Cooperative Oncology Group performance status; ICIs, immune checkpoint inhibitors; PD-1, programmed death-1; PD-L1, programmed death ligand-1; PCI, prophylactic cranial irradiation; CR, complete response; PR, partial response; SD, stable disease; PD, progressive disease.

Table S3 Univariate and multivariate analysis of overall survival for patients treated with chemo-immunotherapy and TRT

Items	Univariate analysis		Multivariate analysis	
	HR (95% CI)	P value	HR (95% CI)	P value
Age (≥ 65 vs. < 65 years)	0.55 (0.30–1.04)	0.064	–	–
Gender (female vs. male)	0.39 (0.12–1.25)	0.114	–	–
Smoking status (yes vs. no)	0.85 (0.46–1.58)	0.614	–	–
ECOG-PS (> 1 vs. ≤ 1)	1.01 (0.27–4.55)	0.897	–	–
Size of primary lesion (≥ 5 vs. < 5 cm)	1.56 (0.77–3.13)	0.215	–	–
Mediastinal lymph node metastasis (yes vs. no)	2.58 (1.01–6.54)	0.047	–	0.061
Primary brain metastasis (yes vs. no)	0.73 (0.33–1.63)	0.444	–	–
Primary liver metastasis (yes vs. no)	4.55 (2.08–9.96)	0.000	4.12 (1.89–8.99)	0.000
Number of initial distant metastases (≥ 3 vs. < 3)	1.73 (0.95–3.13)	0.071	–	–
Superior vena cava syndrome (yes vs. no)	1.34 (0.62–2.87)	0.458	–	–
Pleural effusion (yes vs. no)	1.40 (0.78–2.50)	0.261	–	–
Pericardial effusion (yes vs. no)	1.58 (0.80–3.12)	0.184	–	–
ICIs				
Anti-PD-1 drugs (yes vs. no)	0.88 (0.49–1.58)	0.658	–	–
Anti-PD-L1 drugs (yes vs. no)	1.07 (0.60–1.91)	0.823	–	–
PCI (yes vs. no)	1.46 (0.35–6.06)	0.602	–	–
Extrathoracic radiotherapy (yes vs. no)	1.29 (0.72–2.30)	0.394	–	–
Consolidative TRT (yes vs. no)	0.40 (0.21–0.74)	0.041	0.43 (0.23–0.80)	0.008
Timing of TRT (lately vs. early)	0.66 (0.37–1.18)	0.162	–	–
Dose of TRT				
Conventional radiotherapy (yes vs. no)	0.99 (0.43–2.73)	0.980	–	–
Hyperfractionated radiotherapy (yes vs. no)	0.64 (0.26–1.53)	0.313	–	–
Hypofractionated radiotherapy (yes vs. no)	1.37 (0.69–2.72)	0.369	–	–
Response to systematic before TRT (CR/PR vs. SD/PD)	1.24 (0.68–2.27)	0.484	–	–

TRT, thoracic radiotherapy; HR, hazard ratio; CI, confidence interval; ECOG PS, Eastern Cooperative Oncology Group performance status; ICIs, immune checkpoint inhibitors; PD-1, programmed death-1; PD-L1, programmed death ligand-1; PCI, prophylactic cranial irradiation; CR, complete response; PR, partial response; SD, stable disease; PD, progressive disease.