

Table S1 Baseline characteristics of the immunotherapy versus standard chemotherapy cohort study population

Characteristics	ICI	Non-ICI	P value
Patients	412	100	
Gender, n (%)			0.30
Male	362 (70.7%)	84 (16.4%)	
Female	50 (9.8%)	16 (3.1%)	
Age (years), n (%)			0.47
<65	255 (49.8%)	58 (11.3%)	
≥65	157 (30.7%)	42 (8.2%)	
Body mass index (kg/m ²), n (%)			0.70
≤ median*	335 (65.4%)	83 (16.2%)	
> median	77 (15%)	17 (3.3%)	
Smoking, n (%)	224 (43.8%)	57 (11.1%)	0.64
Hypertension, n (%)	134 (26.2%)	40 (7.8%)	0.16
Hyperlipidemia, n (%)	126 (24.6%)	33 (6.4%)	0.64
Pathological types, n (%)			0.20
Adenocarcinoma	189 (36.9%)	49 (9.6%)	
Squamous carcinoma	199 (38.9%)	41 (8%)	
Other	24 (4.7%)	10 (2%)	
Stages, n (%)			0.21
Stage IV	294 (57.4%)	65 (12.7%)	
Stage III	118 (23%)	35 (6.8%)	

*, the median body mass index is 25 kg/m². ICI, patients treated with immune checkpoint inhibitors; Non-ICI, patients treated with chemotherapy.

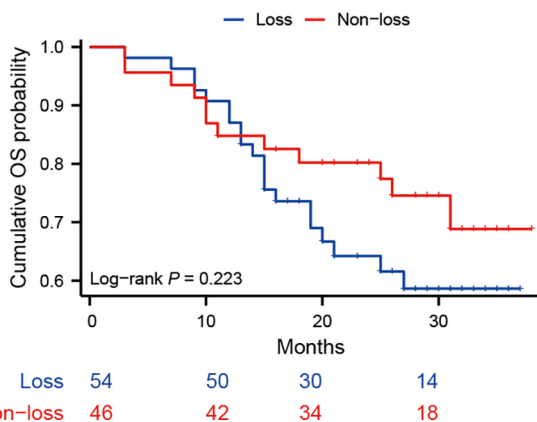


Figure S1 Survival curves for the standard-chemotherapy cohort. OS, overall survival.

Table S2 Radiological response evaluated per RECIST criteria version 1.1 stratified according to the presence or absence of thymic density loss (n=412)

Characteristics	Non-loss (n=202)	Loss (n=210)	P value
Complete response	0	0	
Partial response	106 (52.5%)	96 (45.7%)	
Stable disease	86 (42.6%)	91 (43.3%)	
Progressive disease rate	18 (8.9%)	15 (7.1%)	
Objective response rate	50.0%	47.5%	0.55
Disease control rate	91.4%	82.6%	0.67

RECIST, response evaluation criteria in solid tumors; Non-loss, patients with no loss of thymic density; Loss, patients with loss of thymic density.

Table S3 Analysis of the correlation between changes in thymic density and immunotherapy response

Group	Total (n)	OR (95% CI)	P value
Non-loss	202	Reference	
Loss	210	1.13 (0.77, 1.66)	0.55

Non-loss, patients with no loss of thymic density; Loss, patients with loss of thymic density; CI, confidence interval.