

Table S1 Detailed information of irradiation site and dose in early RT group.

Characteristics	N
Irradiation site	
thorax	41
brain	27
bone	11
adrenal gland	3
chest wall	1
pelvis	1
liver	1
Total dose	
> 30 Gy	61
≤ 30 Gy	24

Table S2 Baseline characteristics of ES-SCLC patients before and after PSM

Characteristic	Before PSM		p value	After PSM		p value
	Early RT Group	Salvage RT Group		Early RT Group	Salvage RT Group	
	(n=76)	(n=54)		(n=54)	(n=54)	
Age group-no.(%)			0.215			0.839
< 65 yr	41(53.9)	35(64.8)		36(66.7)	35(64.8)	
≥65 yr	35(46.1)	19(35.2)		18(33.3)	19(35.2)	
Gender-no.(%)			0.463			0.221
male	68(89.5)	46(85.2)		50(92.6)	46(85.2)	
female	8(10.5)	8(14.8)		4(7.4)	8(14.8)	
ECOG PS-no.(%)			>0.999			>0.999
0	5(6.6)	3(5.6)		4(7.4)	3(5.6)	
1	71(93.4)	51(94.4)		50(92.6)	51(94.4)	
Smoking-no.(%)	47(61.8)	32(59.3)	0.766	33(61.1)	32(59.3)	0.844
Alcohol-no.(%)	8(10.5)	11(20.4)	0.117	5(9.3)	11(20.4)	0.104
Baseline metastasis-no.(%)						
brain	17(22.4)	7(13.0)	0.173	10(18.5)	7(13.0)	0.428
lung	8(10.5)	9(16.7)	0.306	6(11.1)	9(16.7)	0.404
bone	22(28.9)	21(38.9)	0.235	14(25.9)	21(38.9)	0.150
liver	8(10.5)	9(16.7)	0.306	8(14.8)	9(16.7)	0.792
PD-L1 status-no.(%)			0.338			0.208
no test	36(47.4)	30(55.6)		22(40.7)	30(55.6)	
< 1%	33(43.4)	23(42.6)		27(50.0)	23(42.6)	
1%-49%	5(6.6)	1(1.9)		3(5.6)	1(1.9)	
≥50%	2(2.6)	0		2(3.7)	0	
Combined						
chemotherapy-no.(%)	74(97.4)	53(98.1)	0.763	52(96.3)	53(98.1)	>0.999
Type of ICI-no.(%)			0.537			0.800
PD-1	11(14.5)	10(18.5)		9(16.7)	10(18.5)	
PD-L1	65(85.5)	44(81.5)		45(83.3)	44(81.5)	
Recurrent disease-no.(%)	8(10.5)	3(5.6)	0.494	5(9.3)	3(5.6)	0.713

Abbreviation: PSM, propensity score matching; RT, radiotherapy; ECOG PS, Eastern Cooperative Oncology

Group performance status; PD-L1, programmed cell death 1- ligand 1; PD-1, programmed cell death protein-1; ICI,

immune checkpoint inhibitor.

Table S3 Baseline characteristics of ES-SCLC patients before and after PSM

Characteristic	Before PSM			After PSM		
	Salvage RT Group	Non-RT Group	p value	Salvage RT Group	Non-RT Group	p value
	(n=54)	(n=245)		(n=54)	(n=54)	
Age group-no.(%)			0.081			>0.999
< 65 yr	35(64.8)	124(50.6)		35(64.8)	35(64.8)	
≥65 yr	19(35.2)	121(49.4)		19(35.2)	19(35.2)	
Gender-no.(%)			0.581			0.221
male	46(85.2)	218(89.0)		46(85.2)	50(92.6)	
female	8(14.8)	27(11.0)		8(14.8)	4(7.4)	
ECOG PS-no.(%)			0.289			0.184
0	3(5.6)	25(10.2)		3(5.6)	7(13.0)	
1	51(94.4)	220(89.8)		51(94.4)	47(87.0)	
Smoking-no.(%)	32(59.3)	144(58.8)	1.000	32(59.3)	39(72.2)	0.156
Alcohol-no.(%)	11(20.4)	27(11.0)	0.101	11(20.4)	7(13.0)	0.302
Baseline metastasis-no.(%)						
brain	7(13.0)	21(8.6)	0.456	7(13.0)	4(7.4)	0.340
lung	9(16.7)	39(15.9)	1.000	9(16.7)	8(14.8)	0.792
bone	21(38.9)	70(28.6)	0.184	21(38.9)	12(22.2)	0.060
liver	9(16.7)	54(22.0)	0.489	9(16.7)	9(16.7)	>0.999
PD-L1 status-no.(%)			0.259			0.120
no test	30(55.6)	109(44.5)		30(55.6)	37(68.5)	
< 1%	23(42.6)	116(47.3)		23(42.6)	13(24.1)	
1%-49%	1(1.9)	14(5.7)		1(1.9)	2(3.7)	
≥50%	0	6(2.4)		0(0.0)	2(3.7)	
Combined	53(98.1)	238(97.1)	1.000	53(98.1)	51(94.4)	0.610
chemotherapy-no.(%)						
Type of ICI-no.(%)			1.000			0.082
PD-1	10(18.5)	44(18.0)		10(18.5)	19(35.2)	
PD-L1	44(81.5)	201(82.0)		44(81.5)	35(64.8)	
Recurrent disease-no.(%)	3(5.6)	21(8.6)	0.644	3(5.6)	9(16.7)	0.066

Abbreviation: PSM, propensity score matching; RT, radiotherapy; ECOG PS, Eastern Cooperative Oncology Group performance status; PD-L1, programmed cell death 1- ligand 1; PD-1, programmed cell death protein-1; ICI, immune checkpoint inhibitor.