

Supplementary

Table S1 Baseline characteristics of 58 patients with ES-SCLC receiving various radiotherapy doses targeting the thorax

Characteristics	Radiation dose		P value
	BED ≤60 Gy (n=27)	BED >60 Gy (n=31)	
Gender			0.94
Female	1 (3.7)	0 (0.0)	
Male	26 (96.3)	31 (100.0)	
Age (years)	65.81 (9.57)	64.61 (7.27)	0.59
ECOG PS (points)			0.91
<2	23 (85.2)	25 (80.6)	
≥2	4 (14.8)	6 (19.4)	
NRS 2002 (points)			0.36
<3	18 (66.7)	25 (80.6)	
≥3	9 (33.3)	6 (19.4)	
Smoking			0.20
No	7 (25.9)	3 (9.7)	
Yes	20 (74.1)	28 (90.3)	
Underlying disease			0.72
No	17 (63.0)	17 (54.8)	
Yes	10 (37.0)	14 (45.2)	
ProGRP (pg/mL)	176.13 [39.64, 583.07]	532.51 [54.80, 2960.62]	0.15
NSE (ng/mL)	18.61 [5.90, 38.19]	14.70 [4.26, 44.62]	0.68
Sodium concentration (mmol/L)	140.90 [139.10, 142.20]	140.40 [137.85, 141.50]	0.36
T stage			0.19
1	6 (22.2)	4 (12.9)	
2	7 (25.9)	7 (22.6)	
3	4 (14.8)	1 (3.2)	
4	10 (37.0)	19 (61.3)	
N stage			0.36
0	1 (3.7)	2 (6.5)	
1	1 (3.7)	0 (0.0)	
2	10 (37.0)	17 (54.8)	
3	15 (55.6)	12 (38.7)	
M stage			0.13
1a	6 (22.2)	2 (6.5)	
1b	1 (3.7)	4 (12.9)	
1c	20 (74.1)	25 (80.6)	
Clinical stage			0.78
IVA	7 (25.9)	6 (19.4)	
IVB	20 (74.1)	25 (80.6)	

Data are presented as n (%), mean (standard deviation), or median [IQR]. ES-SCLC, extensive-stage small-cell lung cancer; BED, biologically effective dose; ECOG, Eastern Cooperative Oncology Group; PS, performance status; NRS, Nutritional Risk Screening; proGRP, progastrin-releasing peptide; NSE, neuron-specific enolase; IQR, interquartile range.

Table S2 Baseline characteristics of 58 patients with ES-SCLC receiving thoracic radiotherapy with different fractionations

Characteristics	Different fractionated radiotherapy			P value
	Conventional fractionated (n=41)	Hyperfractionated (n=9)	Hypofractionated (n=8)	
Gender				0.81
Female	1 (2.4)	0 (0.0)	0 (0.0)	
Male	40 (97.6)	9 (100.0)	8 (100.0)	
Age (years)	64.73 (8.71)	65.22 (7.51)	67.38 (8.07)	0.72
ECOG PS (points)				0.06
<2	37 (90.2)	6 (66.7)	5 (62.5)	
≥2	4 (9.8)	3 (33.3)	3 (37.5)	
NRS 2002 (points)				0.22
<3	33 (80.5)	5 (55.6)	5 (62.5)	
≥3	8 (19.5)	4 (44.4)	3 (37.5)	
Smoking				0.75
No	7 (17.1)	1 (11.1)	2 (25.0)	
Yes	34 (82.9)	8 (88.9)	6 (75.0)	
Underlying disease				0.64
No	25 (61.0)	4 (44.4)	5 (62.5)	
Yes	16 (39.0)	5 (55.6)	3 (37.5)	
ProGRP (pg/mL)	136.44 [37.02, 699.78]	860.34 [503.99, 7,890.92]	349.72 [168.09, 835.82]	0.057
NSE (ng/mL)	14.11 [4.54, 22.97]	71.98 [25.96, 140.65]	27.31 [8.96, 90.14]	0.04*
Sodium concentration (mmol/L)	140.50 [138.50, 142.00]	140.40 [136.40, 140.80]	141.20 [139.78, 142.82]	0.48
T stage				0.21
1	9 (22.0)	1 (11.1)	0 (0.0)	
2	10 (24.4)	1 (11.1)	3 (37.5)	
3	3 (7.3)	0 (0.0)	2 (25.0)	
4	19 (46.3)	7 (77.8)	3 (37.5)	
N stage				0.16
0	1 (2.4)	1 (11.1)	1 (12.5)	
1	0 (0.0)	0 (0.0)	1 (12.5)	
2	19 (46.3)	5 (55.6)	3 (37.5)	
3	21 (51.2)	3 (33.3)	3 (37.5)	
M stage				0.52
1a	7 (17.1)	0 (0.0)	1 (12.5)	
1b	4 (9.8)	0 (0.0)	1 (12.5)	
1c	30 (73.2)	9 (100.0)	6 (75.0)	
Clinical stage				0.21
IVA	11 (26.8)	0 (0.0)	2 (25.0)	
IVB	30 (73.2)	9 (100.0)	6 (75.0)	

Data are presented as n (%), mean (standard deviation), or median [IQR]. *, P<0.05. ES-SCLC, extensive-stage small-cell lung cancer; ECOG, Eastern Cooperative Oncology Group; PS, performance status; NRS, Nutritional Risk Screening; proGRP, progastrin-releasing peptide; NSE, neuron-specific enolase; IQR, interquartile range.

Table S3 Efficacy evaluation of cTRT with different radiation doses in 58 cases of ES-SCLC

Characteristics	Overall (n=58)	Radiation dose		P value
		BED ≤60 Gy (n=27)	BED >60 Gy (n=31)	
Response				0.99
PD	9 (15.5)	4 (14.8)	5 (16.1)	
SD	16 (27.6)	7 (25.9)	9 (29.0)	
PR	31 (53.4)	15 (55.6)	16 (51.6)	
CR	2 (3.4)	1 (3.7)	1 (3.2)	

Data are presented as n (%). cTRT, consolidative thoracic radiotherapy; ES-SCLC, extensive-stage small-cell lung cancer; BED, biologically effective dose; PD, progressive disease; SD, stable disease; PR, partial response; CR, complete response.

Table S4 Efficacy evaluation of cTRT with different fractionation regimens in 58 cases of ES-SCLC

Characteristics	Different fractionated radiotherapy			P value
	Conventional fractionated (n=41)	Hyperfractionated (n=9)	Hypofractionated (n=8)	
Response				0.72
PD	7 (17.1)	1 (11.1)	1 (12.5)	
SD	12 (29.3)	1 (11.1)	3 (37.5)	
PR	21 (51.2)	6 (66.7)	4 (50.0)	
CR	1 (2.4)	1 (11.1)	0 (0.0)	

Data are presented as n (%). cTRT, consolidative thoracic radiotherapy; ES-SCLC, extensive-stage small-cell lung cancer; BED, biologically effective dose; PD, progressive disease; SD, stable disease; PR, partial response; CR, complete response.

Table S5 Recurrence pattern of cTRT with different radiation doses in 49 cases of ES-SCLC

Characteristics	Overall (n=49)	Radiation dose		P value
		BED ≤60 Gy (n=22)	BED >60 Gy (n=27)	
Recurrence pattern				0.16
Thoracic	12 (24.5)	3 (13.6)	9 (33.3)	
Outside	28 (57.1)	13 (59.1)	15 (55.6)	
Thoracic and outside	9 (18.4)	6 (27.3)	3 (11.1)	

Data are presented as n (%). cTRT, consolidative thoracic radiotherapy; ES-SCLC, extensive-stage small-cell lung cancer; BED, biologically effective dose.

Table S6 Recurrence pattern of cTRT with different fractionation regimens in 49 cases of ES-SCLC

Characteristics	Different fractionated radiotherapy			P value
	Conventional fractionated (n=35)	Hyperfractionated (n=7)	Hypofractionated (n=7)	
Recurrence pattern				0.85
Thoracic	9 (25.7)	1 (14.3)	2 (28.6)	
Outside	20 (57.1)	5 (71.4)	3 (42.9)	
Thoracic and outside	6 (17.1)	1 (14.3)	2 (28.6)	

Data are presented as n (%). cTRT, consolidative thoracic radiotherapy; ES-SCLC, extensive-stage small-cell lung cancer.