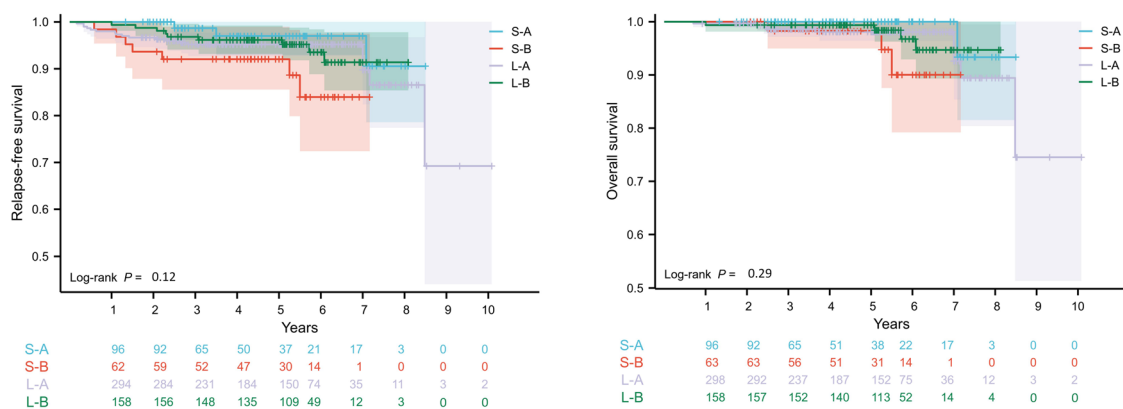


Supplementary



S: Segmentectomy; L: Lobectomy; A: Subgroup A (2 cm < tumor size ≤ 3 cm, CTR ≤ 0.5); B: Subgroup B (tumor size ≤ 2 cm, 0.25 < CTR ≤ 0.5)

**Figure S1** Survival of subgroup A (2 cm < tumor size ≤ 3 cm, CTR ≤ 0.5) and subgroup B (tumor size ≤ 2 cm, 0.25 < CTR ≤ 0.5) patients undergoing segmentectomy and lobectomy.

**Table S1** Clinicopathological characteristics of lobectomy and segmentectomy after propensity score matching

Variables	Lobectomy, n=159	Segmentectomy, n=159	P	Standardized mean difference	
				Before PSM	After PSM
Age, years	60.9±8.1	60.4±9.1	0.61	0.009	-0.054
Sex, n (%)			0.73		
Male	59 (37.1)	56 (35.2)		0.043	-0.040
Female	100 (62.9)	103 (64.8)		-0.043	0.040
Smoke status, n (%)			0.90		
Ever	40 (25.2)	39 (24.5)		0.073	-0.015
Never	119 (74.8)	120 (75.5)		-0.073	0.015
Predominant subtype, n (%)			0.97		
Lepidic	25 (15.7)	22 (13.8)		0.080	-0.055
Acinar	81 (50.9)	88 (55.3)		0.042	0.089
Papillary	37 (23.3)	33 (20.8)		0.016	-0.062
Mucinous	8 (5.0)	9 (5.7)		0.037	0.027
Micropapillary	3 (1.9)	3 (1.9)		0.010	0.000
Solid	5 (3.1)	4 (2.5)		-0.062	-0.040
Image, n (%)			0.56		
Pure GGO	55 (34.6)	51 (32.1)		-0.094	-0.068
Part-solid	104 (63.4)	108 (67.9)		0.094	0.068
CTR of part-solid nodules	0.36±0.06	0.37±0.09	0.53	0.128	0.072
Whole-tumor size, cm	2.12±0.56	2.10±0.53	0.77	-0.164	-0.030
Target subgroup, n (%)			0.73		
A: 2 cm < Tumour size ≤ 3 cm, CTR ≤ 0.5	99 (62.9)	96 (60.4)		-0.105	-0.039
B: Tumour size ≤ 2 cm, 0.25 < CTR ≤ 0.5	60 (37.7)	63 (39.6)		0.105	0.039
Location, n (%)			0.81		
Right upper lobe	53 (33.3)	50 (31.4)		-0.085	-0.032
Right middle lobe	9 (5.7)	8 (5.0)		0.043	-0.028
Right lower lobe	43 (27.0)	45 (28.3)		0.096	0.012
Left upper lobe	33 (20.8)	36 (22.6)		-0.055	0.048
Left lower lobe	21 (13.2)	20 (12.6)		0.037	-0.030
Nodal dissection, n (%)			0.33		
Hilar	0 (0)	3 (1.9)		0.139	0.139
Mediastinal, selective	57 (35.8)	55 (34.6)		0.065	-0.026
Mediastinal, systematic	102 (64.2)	101 (63.5)		-0.102	-0.013
Pathological stage			0.78		
IA	147 (92.5)	149 (93.7)		0.078	0.024
IB (T2aN0)	12 (7.5)	10 (6.3)		-0.046	-0.012
IIB	0 (0)	0 (0)		-0.164	0.000

Data are presented as n (%) or mean ± standard deviation. CTR, consolidation tumor ratio; PSM, propensity score matching

**Table S2** Causes of death for lobectomy and segmentectomy groups

Causes of death	Lobectomy (n=458)	Segmentectomy (n=159)
Total, % (P=0.83)	13 (2.8)	4 (2.5)
Lung cancer related	4	1
Other cancer related	6	2
Other disease	3	1
Respiratory disease	2	0
Cardiovascular disease	1	1

**Table S3** Categories of early and late postoperative complications

Category	Total	Lobectomy	Segmentectomy
Early postoperative complication			
Grade 1	36	28	8
Pain	13	10	3
Cough	9	7	2
Fever	7	5	2
Pleural effusion	4	3	1
Pulmonary fistula	1	1	–
Atelectasis	2	2	–
Grade 2	51	39	12
Pain	17	15	2
Cough	9	6	3
Fever	5	3	2
Pleural effusion	3	2	1
Pulmonary fistula	4	3	1
Atelectasis	2	1	1
Infection	6	4	2
Pneumothorax	4	4	–
Emphysema	1	1	–
Grade 3	7	5	2
Infection	7	5	2
Late postoperative complication			
Grade 1	16	13	3
Cough	8	6	2
Pulmonary fistula	3	3	–
Pleural effusion	4	3	1
Pneumothorax	1	1	–
Grade 2	9	8	1
Cough	6	5	1
Pulmonary fistula	1	1	–
Infection	2	2	–