



Figure S1 Study flow diagram.

**Table S1** Univariable and multivariable analysis of predictors of worse disease-free-survival

Predictor variables	Univariate predictors		Multivariate predictors	
	HR (95% CI)	P value*	HR (95% CI)	P value
Age, years	1.056 (1.020–1.093)	0.002	1.042 (1.017–1.068)	<0.001
Gender				
Female	Reference		Reference	
Male	1.240 (0.707–2.171)	0.453		
Smoking status				
Never	Reference		Reference	
Current	1.972 (0.740–5.255)	0.174	1.418 (0.742–2.709)	0.291
Former	2.173 (0.906–5.208)	0.082	0.979 (0.556–1.721)	0.940
ECOG performance status				
0	Reference		Reference	
1 or 2	2.155 (0.967–4.801)	0.060	1.232 (0.673–2.256)	0.500
Histologic subtype				
Adenocarcinoma	Reference		Reference	
Squamous cell carcinoma	3.024 (1.622–5.636)	<0.001	1.800 (1.079–3.002)	0.024
Other	0.990 (0.135–7.257)	0.992	1.743 (0.688–4.417)	0.241
Procedure type				
Lobectomy	Reference		Reference	
Wedge resection	0.847 (0.405–1.770)	0.659		
Segmentectomy	0.579 (0.256–1.310)	0.579		
Surgical approach				
RATS	Reference		Reference	
VATS	1.433 (0.445–4.617)	0.546	1.175 (0.503–2.747)	0.710
Thoracotomy	3.959 (0.661–23.706)	0.132	2.412 (0.651–8.934)	0.188
Pulmonary function test				
%FEV <sub>1</sub>	0.988 (0.975–1.002)	0.097	0.990 (0.980–9.99)	0.034
Clinical tumor size	1.293 (0.842–1.986)	0.239		
Pathologic stage				
Stage 0 + stage I	Reference		Reference	
Stage II	2.443 (0.962–6.199)	0.060	3.430 (1.877–6.269)	<0.001
Stage III + IV	3.199 (1.260–8.122)	0.014	4.128 (1.944–8.769)	<0.001
Nodule type				
Part-solid	Reference		Reference	
Solid	2.558 (1.044–6.268)	0.040	2.135 (0.851–5.354)	0.106

\*, in the univariable analysis, if P value of a predictor variable was <0.20 then it was included in the multivariable analysis. HR, hazard ratio; CI, confidence interval; ECOG, Eastern Cooperative Oncology Group; RATS, robot-assisted thoracoscopic surgery; VATS, video-assisted thoracoscopic surgery; %FEV<sub>1</sub>, percentage of predicted forced expiratory volume in one second.

**Table S2** Perioperative morbidity and mortality, with detailed complication rates following wedge resection, segmentectomy, and lobectomy

Variables	Wedge resection (N=93)	Segmentectomy (N=90)	Lobectomy (N=297)	P value
<b>Morbidity</b>				
Any complication	9 (9.7)	14 (15.6)	44 (14.8)	0.41
None	84 (90.3)	76 (84.4)	253 (85.2)	
<b>Individual complications</b>				
Return to OR	3 (3.2)	3 (3.3)	9 (3)	0.98
Atrial arrhythmia	1 (1.1)	3 (3.3)	13 (4.4)	0.32
Ventricular arrhythmia	0 (0)	0 (0)	1 (0.3)	0.73
Pulmonary embolus	0 (0)	0 (0)	1 (0.3)	0.73
Prolonged air leak	1 (1.1)	2 (2.2)	10 (3.4)	0.47
Pneumothorax	1 (1.1)	1 (1.1)	7 (2.4)	0.61
Prolonged chest tube drainage	0 (0)	0 (0)	1 (0.3)	0.73
Re-intubation	0 (0)	0 (0)	4 (1.3)	0.29
Prolonged intubation	0 (0)	0 (0)	1 (0.3)	0.73
Pneumonia	0 (0)	1 (1.1)	4 (1.3)	0.54
Urinary tract infection	1 (1.1)	0 (0)	3 (1)	0.63
<b>Mortality</b>				
Perioperative mortality $\leq$ 30 days	1 (1.1)	0 (0)	2 (0.7)	0.644
90-day mortality	1 (1.1)	2 (2.2)	4 (1.4)	0.784

Data are presented as frequency (%). OR, operating room.