



Figure S1 Flowchart.

Table S1 Baseline characteristics by procedure (lobectomy vs. segmentectomy)

Variable	Lobectomy	Segmentectomy	P value
Age (years)	n=1347; 65.8±9.8; 66.7 [60.0–72.3]	n=775; 66.7±9.0; 67.7 [61.0–72.9]	0.02
Female sex	685 (50.8%)	421 (54.3%)	0.14
Body mass index (kg/m ²)	n=1320; 24.9±4.5; 24.4 [21.5–27.7]	n=770; 25.0±4.7; 24.5 [21.9–27.8]	0.39

Data are presented as mean ± SD, median [IQR], or n (%).

Table S2 Perioperative outcomes by procedure

Variable	Lobectomy	Segmentectomy	P value
Operative time (min)	N=1329; 161.6±52.2; 154.0 [122.0–195.0]	N=774; 171.2±52.6; 169.0 [132.0–203.8]	<0.001
Length of hospital stay (days)	N=1320; 7.1±6.5; 6.0 [4.0–8.0]	N=765; 5.6±4.9; 4.0 [3.0–6.0]	<0.001
Chest drainage duration (days)	N=1312; 4.1±3.8; 3.0 [2.0–5.0]	N=765; 3.3±3.9; 2.0 [1.0–4.0]	<0.001
Conversion to thoracotomy	96 (7.1%)	18 (2.3%)	<0.001
Postoperative complications	425 (32.0%)	214 (27.6%)	0.03

Data are presented as mean ± SD and median [IQR], or n (%).

Table S3 Postoperative complications, details

(A) Overall complication rate according to surgical procedure

Intervention	N patients	Patients with complications	Complication rate
Bilobectomy	17	8	47.1%
Lobectomy	1,329	425	32.0%
Pneumonectomy	2	0	0.0%
Segmentectomy	776	214	27.6%

(B) Distribution of complications at the patient level

Complication category	N	% of patients
No complication	1316	62.0%
Respiratory	453	21.3%
Cardiac	49	2.3%
Neurological	36	1.7%
Urinary	27	1.3%
Chest wall	15	0.7%
Lymphatic	12	0.6%
Digestive	5	0.2%
Not specified	210	9.9%
Other	1	0.0%

(C) Distribution of complications according to complication type

Complication category	N	% of complications
Respiratory	453	70.0%
Cardiac	49	7.6%
Not specified	49	7.6%
Neurological	36	5.6%
Urinary	27	4.2%
Chest wall	15	2.3%
Lymphatic	12	1.9%
Digestive	5	0.8%
Other	1	0.2%

(D) Detailed classification of postoperative complications

Complication subtype	N	% of complications
Prolonged air leak	246	38.0%
Pneumonia	88	13.6%
Other respiratory	88	13.6%
Cardiac complications	49	7.6%
Lung re-expansion complication	30	4.6%
Peripheral neurological deficit	29	4.5%
Urinary retention	24	3.7%
Hemothorax	23	3.6%
Wound scar complication	13	2.0%
Deep surgical site infection	12	1.9%
Chylothorax	12	1.9%
Central neurological complication	8	1.2%
Thromboembolic event	5	0.8%
Ischemic complication	4	0.6%
Renal complication	4	0.6%
Digestive transit disorder	3	0.5%
Chest wall complication	2	0.3%
Urinary infection	2	0.3%
Pulmonary complication (other)	1	0.2%
Infection (unspecified)	1	0.2%
Digestive ileus	1	0.2%
Digestive injury	1	0.2%
Digestive colitis	1	0.2%

Data are presented as n (%).