



Figure S1 Trend in operation related variables by year. Blue solid line indicated uniport thoracoscopic basal segmentectomy, red solid line indicated triport thoracoscopic basal segmentectomy.

Table S1 Details of single segmentectomy and combined segmentectomy of the overall and the matched cohort

Overall cohort			Matched cohort		
Type	UTBS (N=67)	TTBS (N=233)	Type	UTBS (N=64)	TTBS (N=64)
single segment resection	N=35	N=144	Single segment resection	N=35	N=40
Left lower			Left lower		
S8	14	42	S8	14	22
S9	0	8	S9	0	0
S10	5	29	S10	5	16
Right lower			Right lower		
S7	2		S7	2	0
S8	9	41	S8	9	41
S9	2	10	S9	2	10
S10	3	14	S10	3	14
Two segments resection	N=27	N=77	Two segments resection	N=26	N=22
LS6+10	1	8	LS6+10	1	6
RS6+10	1	6	RS6+10	1	1
RS6c+10	0	1	LS10a+ci	1	0
LS10a+ci	1	0	LS6+8	0	3
LS6+8	0	4	RS6+8	1	2
RS6+8	2	4	RS6b+8	1	0
RS6b+8	1	1	LS6b+8a	0	1
LS6b+8a	0	2	RS7+8	1	0
RS6b+8a	0	1	RS7a+S8	1	0
RS7+10	0	3	LS8+9	2	1
RS7+8	1	4	RS8+9	5	2
RS7a+S8	1	0	LS8a+S9a	1	0
LS8+9	2	4	LS9+10	5	6
RS8+9	5	11	LS9a+10	1	0
RS8+9a	0	1	RS9+10	4	0
LS8a+S9a	1	0	RS9a+10	1	0
LS9+10	5	17			
LS9a+10	1	0			
RS9+10	4	8			
RS9+10b	0	1			
RS9a+10	1	0			
Three segments resection	N=5	N=12	Three segments resection	N=3	N=2
LS6+9+10	2	3	LS6+9+10	1	2
RS7a+6c+6bi	0	1	RS6b+8+9	1	0
RS6c+8+10	0	1	RS6+RS9a+RS10a	1	0
RS6b+8+9	1	0			
RS6+9+10	1	3			
RS7+8+9	0	3			
RS7a+8+9	1	0			
RS8+6a+6b	0	1			
RS6+RS9a+RS10a	1	0			

UTBS, uniport thoracoscopic basal segmentectomy; TTBS, triport thoracoscopic basal segmentectomy.

Table S2 Subgroup analysis of operative time and intraoperative blood loss within the UTBS and the TTBS group before and after propensity score matching

Variables	Overall cohort			Matched cohort		
	SBS	CBS*	P value	SBS	CBS	P value
Operative time (min)	105 (85-125)	120 (100-155)	0.002	110 (87.5-125)	120 (110-138)	0.002
UTBS	115 (80-120)	120 (117.5-142.5)	0.037	112.5 (70-121.25)	120 (113.75-126.25)	0.070
TTBS	103.5 (85-125)	120 (100-155)	0.001	105 (90-125)	120 (106-157.5)	0.011
Intraoperative blood loss (mL)	20 (10-30)	20 (20-40)	0.159	20 (15-30)	30 (15-40)	0.110
UTBS	20 (20-20)	20 (10-30)	0.289	20 (17.5-20)	20 (10-30)	0.282
TTBS	20 (10-30)	20 (20-50)	0.057	30 (10-50)	30 (25-50)	0.221

Values are presented as median (interquartile range). *, CBS, combined basal segmentectomy, because the total number of three segments resected was too small, we combined the two segments and the three segments resected into one group called combined segmentectomy. UTBS, uniport thoracoscopic basal segmentectomy; TTBS, triport thoracoscopic basal segmentectomy; SBS, single basal segmentectomy.

Table S3 Detailed results of recurrence and metastasis of patients

Patient	Postoperative Pathological Stage	Tumor Location	Surgical Procedure	Surgical Rationale	Lymph Node Management	Recurrence Time	Survival Status (During follow-up)
Patient 1	T1bN0M0	Left lower lobe, S9 and S10 junction	Left lower lobe combined S9+10 resection	Sufficient margin requirement	Lobe-specific hilar and mediastinal lymph node dissection	23 months	alive
Patient 2	T1bN0M0	Left lower lobe, anterior basal segment near dorsal segment	Left lower lobe S8 resection + partial dorsal segment resection	Sufficient margin requirement	Systematic hilar and mediastinal lymph node dissection	9 months	alive
Patient 3	T1aN0M0	Right lower lobe, anterior basal segment	Right lower lobe S8 resection	The deep location of the tumor was not suitable for wedge resection	Lobe-specific hilar and mediastinal lymph node dissection	80 months	alive
Patient 4 (brain)	T1bN2M1b	Left lower lobe, anterior basal segment	Left lower lobe S8 resection	The deep location of the tumor was not suitable for wedge resection	Systematic hilar and mediastinal lymph node dissection	26 months	alive
Patient 5 (bone)	T1bN0M1b	Right lower lobe, posterior basal segment near dorsal segment	Right lower lobe posterior basal segment resection + partial dorsal segment resection	Sufficient margin requirement	Systematic hilar and mediastinal lymph node dissection	10 months	alive

Patients 1-3 were local recurrences and patients 4-5 were distant metastases.