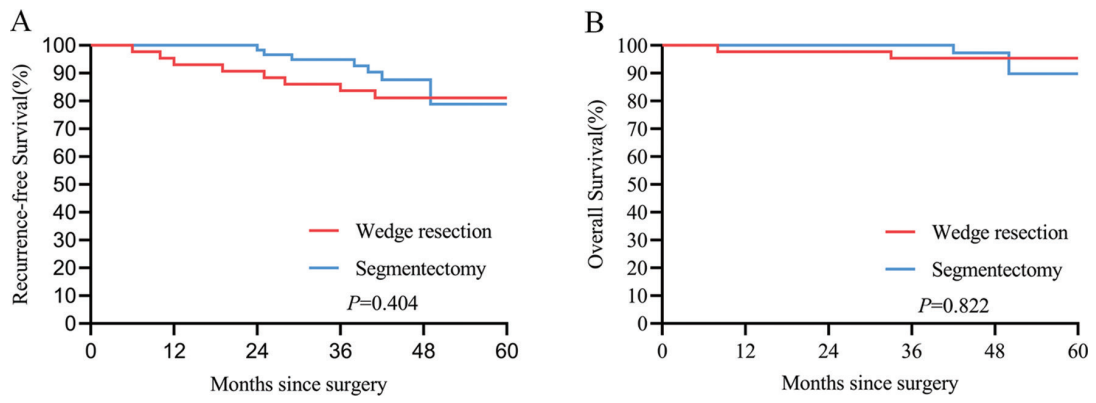


**Figure S1** Patient selection scheme and flowchart of the study. STAS, spread through air space; OS, overall survival; RFS, recurrence-free survival.



**Figure S2** Kaplan-Meier survival analysis on wedge resection and segmentectomy in the matched cohort.

**Table S1** Associations between ACT and clinicopathologic characteristics of patients in the STAS-positive cohort

Variables	All (n=75)	ACT		P
		Without (n=30)	With (n=45)	
Age at surgery (years)				0.149
≤65	30 (40.0)	9 (30.0)	21 (46.7)	
>65	45 (60.0)	21 (70.0)	24 (53.3)	
Sex				0.569
Male	42 (56.0)	18 (60.0)	24 (53.3)	
Female	33 (44.0)	12 (40.0)	21 (46.7)	
Smoking history				0.503
Never	44 (58.7)	19 (63.3)	25 (55.6)	
Ever	31 (41.3)	11 (36.7)	20 (44.4)	
ECOG PS				0.819
0–1	67 (89.3)	26 (86.7)	41 (91.1)	
≥2	8 (10.7)	4 (13.3)	4 (8.9)	
Nodal dissection				0.030*
No dissection	6 (8.0)	2 (6.7)	4 (8.9)	
Hilar	16 (21.3)	11 (36.7)	5 (11.1)	
Mediastinal, systematic or selective	53 (70.7)	17 (56.7)	36 (80.0)	
Pleural invasion				0.377
Absent	15 (20.0)	4 (13.3)	11 (24.4)	
Present	60 (80.0)	26 (86.7)	34 (75.6)	
Vascular invasion				0.225
Absent	57 (76.0)	25 (83.3)	32 (71.1)	
Present	18 (24.0)	5 (16.7)	13 (28.9)	
Architectural histological grade				0.594
Intermediate grade	55 (73.3)	23 (76.7)	32 (71.1)	
High grade	20 (26.7)	7 (23.3)	13 (28.9)	
CEA (ng/mL)				0.041*
≤5	57 (76.0)	27 (90.0)	30 (66.7)	
>5	18 (24.0)	3 (10.0)	15 (33.3)	
Nodule type on CT				0.618
Part solid	13 (17.3)	6 (20.0)	7 (15.6)	
Solid	62 (82.7)	24 (80.0)	38 (84.4)	
Surgical procedure				0.003*
Limited resection	25 (33.3)	16 (53.3)	9 (20.0)	
Lobectomy	50 (66.7)	14 (46.7)	36 (80.0)	

\*, significant P values. ACT, adjuvant chemotherapy; STAS, spread through air spaces; ECOG PS, Eastern Cooperative Oncology Group Performance Status; CEA, carcinoembryonic antigen; CT, computed tomography.