

Table S1 Patients' clinicopathologic characteristics in SPN and MPN group

Clinicopathologic characteristic	SPN	MPN	P. value
Gender, n (%)			0.852
Male	35 (35.4)	31 (34.1)	
Female	64 (64.6)	60 (65.9)	
Age, y (range)	62 (50.5–72)	61 (53–66.5)	0.435
BMI	24.1 (22.2–26.9)	23.6 (21.9–25.6)	0.212
Smoking history, n (%)			0.997
No	74 (74.7)	68 (74.7)	
Yes	25 (25.3)	23 (25.3)	
Family history of carcinoma, n (%)			0.299
No	67 (67.7)	55 (60.4)	
Yes	32 (32.3)	36 (39.6)	
Tumor size (cm), n (%)	1.2 (0.9–1.5)	1.3 (1.05–1.6)	0.424
Clinical T stage, n (%)			0.944
cT1a	69 (69.7)	63 (69.2)	
cT1b	30 (30.3)	28 (30.8)	
Imaging features, n (%)			0.071
GGO-dominant	75 (75.8)	58 (63.7)	
Solid-dominant	24 (24.2)	33 (36.3)	
Number of cases with systematic mediastinal nodal sampling, n (%)	46 (46.5)	54 (59.3)	0.076
LN sampling number, n (range)	3 (0–7)	4 (0–7.5)	0.374
Pathologic T stage, n (%)			0.424
pT1a	48 (48.5)	36 (39.6)	
pT1b	29 (29.3)	29 (31.9)	
pT2a [Vis PI]	22 (22.2)	26 (28.6)	
Pathologic N stage, n (%)			0.952
N0/Nx	98 (99.0)	90 (98.9)	
N1/2	1 (1.0)	1 (1.1)	
Histological differentiation, n (%)			0.328
Grade I	65 (65.7)	51 (56.0)	
Grade II	26 (26.3)	28 (30.8)	
Grade III	8 (8.1)	12 (13.2)	

BMI, body mass index; GGO, ground-glass opacity; MPN, multiple pulmonary nodule; SPN, solitary pulmonary nodule; Vis PI, visceral pleura invasion.

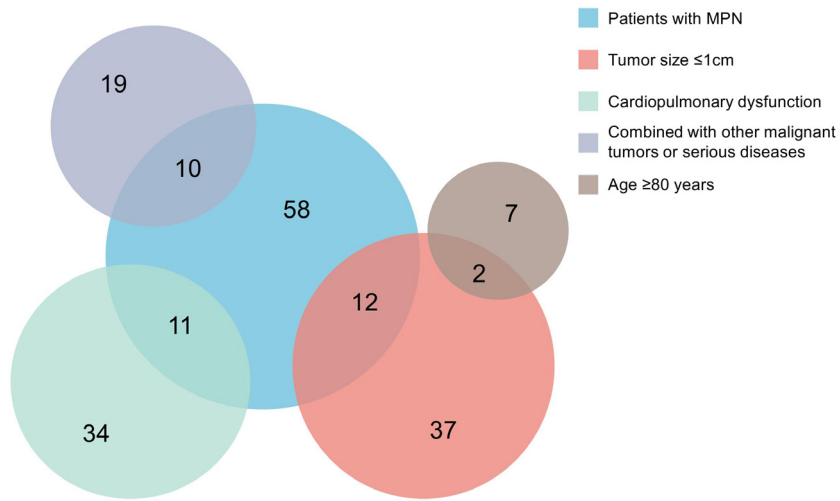


Figure S1 Venn diagram of indications for patients underwent wedge resection. MPN, multiple pulmonary nodule.

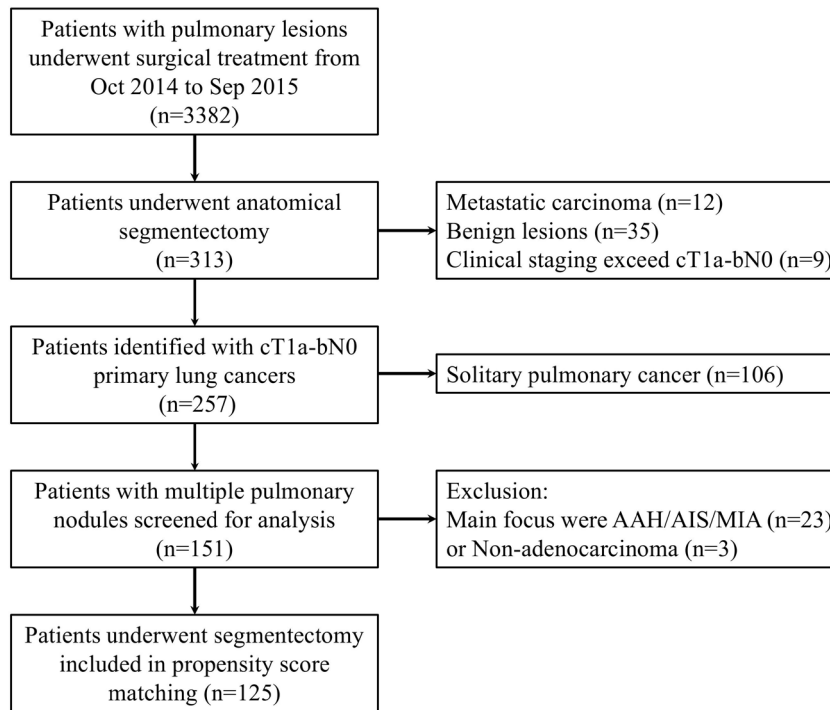


Figure S2 The flow diagram of the patient selection who underwent segmentectomy.

Table S2 The detail information of patients with tumor progression

Patients with tumor progression	Sex	Age	MPN/SPN	Imaging feature	Locations of recurrence or metastasis	Vis PI	MVI	Tumor size (cm)	Histological differentiation	Pathological subtype
1	Female	67	SPN	Solid-dominant	Pleural metastasis	Yes	No	1.7	Grade II	Mucinous adenocarcinoma
2	Male	68	SPN	Solid-dominant	Pleural metastasis	Yes	No	1.2	Grade II	Papillary
3	Male	77	SPN	Solid-dominant	Ipsilateral intrapulmonary metastasis	No	No	1.2	Grade III	Papillary
4	Female	64	SPN	Solid-dominant	Pleural metastasis	Yes	No	1.6	Grade II	Papillary
5	Male	51	SPN	Solid-dominant	Local recurrence	No	No	1.4	Grade I	Lepidic/Acinar
6	Female	71	MPN	GGO-dominant	Local recurrence	No	No	1.6	Grade I	Lepidic/Acinar
7	Male	57	MPN	Solid-dominant	Pleural metastasis	No	No	1.7	Grade II	Lepidic/Acinar
8	Female	69	MPN	Solid-dominant	Brain metastasis	Yes	No	1.3	Grade III	Lepidic/Acinar
9	Male	61	MPN	Solid-dominant	Local recurrence	Yes	Yes	1.8	Grade II	Micropapillary
10	Female	58	MPN	Solid-dominant	Mediastinal lymph node metastasis	Yes	Yes	1.6	Grade II	Micropapillary
11	Female	45	MPN	Solid-dominant	Local recurrence	No	No	1.5	Grade II	Lepidic/Acinar
12	Female	58	MPN	Solid-dominant	Mediastinal lymph node metastasis	No	Yes	0.9	Grade III	Micropapillary
13	Male	61	MPN	Solid-dominant	Adrenal metastases	Yes	No	1.6	Grade III	Lepidic/Acinar
14	Male	60	MPN	GGO-dominant	Local recurrence	No	No	1	Grade I	Lepidic/Acinar
15	Male	62	MPN	Solid-dominant	Local recurrence	No	No	1.3	Grade III	Lepidic/Acinar
16	Female	58	MPN	Solid-dominant	Bone metastasis	Yes	No	1.7	Grade II	Lepidic/Acinar
17	Female	79	MPN	Solid-dominant	Mediastinal lymph node metastasis	Yes	Yes	1.8	Grade III	Micropapillary
18	Male	82	MPN	Solid-dominant	Ipsilateral intrapulmonary metastasis	Yes	Yes	1.2	Grade III	Mucinous adenocarcinoma
19	Female	52	MPN	Solid-dominant	Mediastinal lymph node metastasis	Yes	No	1.8	Grade II	Lepidic/Acinar
20	Male	61	MPN	Solid-dominant	Pleural metastasis	Yes	No	1.5	Grade II	Papillary

MPN, multiple pulmonary nodule; MVI, microscopic vascular invasion; SPN, solitary pulmonary nodule; Vis PI, visceral pleura invasion.

Table S3 Baseline characteristics: wedge resection versus segmentectomy before propensity score matching

Variables	Wedge resection	Segmentectomy	P value
Age, y (range)	61 (53–66.5)	58 (53–65)	0.164
Female sex, n (%)	60 (65.9)	105 (74.5)	0.161
Tumor size, cm (range)	1.3 (1.05–1.6)	1.5 (1.2–1.9)	0.014
Clinical T stage, n (%)			0.044
cT1a	63 (69.2)	79 (56.0)	
cT1b	28 (30.8)	62 (44.0)	
Imaging feature			0.139
GGO-dominant	58 (63.7)	76 (53.9)	
Solid-dominant	33 (36.3)	65 (46.1)	
Number of cases with systematic mediastinal nodal sampling, n (%)	54 (59.3)	125 (88.7)	<0.001
LN sampling number, n (range)	4 (0–7.5)	10 (6–13)	<0.001
Pathologic T stage, n (%)			0.025
pT1a	36 (39.6)	57 (40.4)	
pT1b	29 (31.9)	63 (44.7)	
pT2a [Vis PI]	26 (28.6)	21 (14.9)	
Pathologic N stage, n (%)			0.053
N0/Nx	90 (98.9)	132 (93.6)	
N1/2	1 (1.1)	9 (6.4)	
Histological differentiation			0.131
Grade I	51 (56.0)	83 (58.9)	
Grade II	28 (30.8)	50 (35.5)	
Grade III	12 (13.2)	8 (5.7)	

LN, lymph node.