

Table S1 Clinicopathologic characteristics of patients of external validation cohort (N=117)

Characteristics	Total (N=117)		AAH (n=2)		AIS (n=16)		MIA (n=38)		IAC (n=43)		Other infiltrative malignancies (n=6)		Low-grade malignancies (n=0)		Benign (n=12)		P
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	
Age (mean ± SD)	56.5±11.8		49.0±9.9		48.3±12.3		53.9±12.3		60.9±10.2		62.7±9.4		NA		57.9±8.8		0.002
Sex																	0.005
Male	50	42.7	1	50	6	37.5	10	26.3	19	44.2	6	100	NA	NA	8	66.7	
Female	67	57.3	1	50	10	62.5	28	73.7	24	55.8	0	0	NA	NA	4	33.3	
Surgical methods																	<0.001
Wedge resection	34	29.1	2	100	11	68.8	10	26.3	1	2.3	0	0	NA	NA	10	83.3	
Segmentectomy	21	17.9	0	0	4	25	15	39.5	2	4.7	0	0	NA	NA	0	0	
Lobectomy	62	53	0	0	1	6.2	13	34.2	40	93	6	100	NA	NA	2	16.7	
Location of tumor																	0.687
RUL	45	38.5	1	50	7	43.8	15	39.5	16	37.2	2	33.3	NA	NA	4	33.3	
RML	10	8.5	1	50	2	12.5	2	5.3	4	9.3	0	0	NA	NA	1	8.3	
RLL	20	17.1	0	0	2	12.5	9	23.7	6	14	1	16.7	NA	NA	2	16.7	
LUL	26	22.2	0	0	3	18.8	11	28.9	8	18.6	1	16.7	NA	NA	3	25	
LLL	16	13.7	0	0	2	12.5	1	2.6	9	20.9	2	33.3	NA	NA	2	16.7	
Maximum diameter of tumor																	<0.001
≤1 cm	50	42.7	2	100	16	100	25	65.8	4	9.3	0	0	NA	NA	3	25	
1 < d ≤2 cm	48	41	0	0	0	0	12	31.6	26	60.5	3	50	NA	NA	7	58.3	
2 < d ≤3 cm	19	16.2	0	0	0	0	1	2.6	13	30.2	3	50	NA	NA	2	16.7	
Lymph node situation																	0.84
N0	114	97.4	2	100	16	100	38	100	40	93	6	100	NA	NA	12	100	
N1	1	0.9	0	0	0	0	0	0	1	2.3	0	0	NA	NA	0	0	
N2	2	1.7	0	0	0	0	0	0	2	4.7	0	0	NA	NA	0	0	
CT imaging																	<0.001
GGO component																	<0.001
Yes	81	69.2	1	50	16	100	38	100	24	55.8	0	0	NA	NA	2	16.7	
No	36	30.8	1	50	0	0	0	0	19	44.2	6	100	NA	NA	10	83.3	
Pleural indentation																	<0.001
Yes	41	35	0	0	0	0	6	15.8	32	74.4	2	33.3	NA	NA	1	8.3	
No	76	65	2	100	16	100	32	84.2	11	25.6	4	66.7	NA	NA	11	91.7	
Smoking history																	<0.001
Yes	23	19.7	0	0	1	6.2	3	7.9	10	23.3	6	100	NA	NA	3	25	
No	94	80.3	2	100	15	93.8	35	92.1	33	76.7	0	0	NA	NA	9	75	
Tumor biomarkers (mean ± SD)																	
CEA	1.93±4.77		0.33±0.47		0.53±0.61		1.08±1.31		3.18±7.32		1.30±0.77		NA		2.62±4.01		0.299
CA19-9	2.33±1.45		1.95±0.35		1.95±0.69		2.33±1.19		2.37±1.54		3.42±3.80		NA		2.24±0.67		0.461
CYFRA21-1	0.79±2.61		0.80±0.28		0.40±0.26		0.50±0.29		1.30±4.28		0.50±0.28		NA		0.54±0.30		0.764
NSE	9.20±4.03		10.5±5.23		8.48±3.67		9.02±3.49		9.98±4.79		6.42±3.53		NA		9.08±2.86		0.386
CA125	8.62±7.28		8.45±6.29		8.57±7.29		8.17±4.58		9.83±10.10		7.18±1.57		NA		6.58±3.10		0.782

AAH, atypical adenomatous hyperplasia; AIS, adenocarcinoma *in situ*; MIA, minimally invasive adenocarcinoma; IAC, invasive adenocarcinoma; RUL, right upper lobe; RLL, right lower lobe; RML, right middle lobe; LUL, left upper lobe; LLL, left lower lobe; CT, computed tomography; GGO, Ground Glass Opacity; CEA, carcinoembryonic antigen; CA19-9, carbohydrate antigen 19-9; CYFRA21-1, cytokeratin 19 fragment antigen 21-1; NSE, neuron-specific enolase; CA125, cancer antigen 125; SD, standard deviation.