

Table S1 Comparison of clinical and imaging characteristics of lung INMA across SUV index tertile groups

Characteristics	Total (n=782)	Tertile 1 (n=261)	Tertile 2 (n=260)	Tertile 3 (n=261)	P value
Age (years)	64.1±9.1	64.4±8.2	64.3±9.7	63.4±9.3	0.350
Gender					<0.001
Female	458 (58.6%)	177 (67.8%)	171 (65.8%)	110 (42.1%)	
Male	324 (41.4%)	84 (32.2%)	89 (34.2%)	151 (57.9%)	
Smoking history	241 (30.8%)	57 (21.8%)	65 (25.0%)	119 (45.6%)	<0.001
Histological grade					<0.001
1	58 (7.4%)	53 (20.3%)	4 (1.5%)	1 (0.4%)	
2	520 (66.5%)	198 (75.9%)	217 (83.5%)	105 (40.2%)	
3	204 (26.1%)	10 (3.8%)	39 (15.0%)	155 (59.4%)	
TNM stage					<0.001
1	579 (74.0%)	245 (93.9%)	205 (78.8%)	129 (49.4%)	
2	84 (10.7%)	7 (2.7%)	29 (11.2%)	48 (18.4%)	
3	103 (13.2%)	7 (2.7%)	23 (8.8%)	73 (28.0%)	
4	16 (2.0%)	2 (0.8%)	3 (1.2%)	11 (4.2%)	
Location					0.062
LUL	227 (29.0%)	71 (27.2%)	66 (25.4%)	90 (34.5%)	
LLL	103 (13.2%)	34 (13.0%)	39 (15.0%)	30 (11.5%)	
RUL	242 (30.9%)	84 (32.2%)	72 (27.7%)	86 (33.0%)	
RML	70 (9.0%)	23 (8.8%)	24 (9.2%)	23 (8.8%)	
RLL	140 (17.9%)	49 (18.8%)	59 (22.7%)	32 (12.3%)	
Lesion type					<0.001
Subsolid	415 (53.1%)	231 (88.5%)	135 (51.9%)	49 (18.8%)	
Solid	367 (46.9%)	30 (11.5%)	125 (48.1%)	212 (81.2%)	
Shape					0.241
Round/quasi-round	237 (30.3%)	88 (33.7%)	70 (26.9%)	79 (30.3%)	
Irregular	545 (69.7%)	173 (66.3%)	190 (73.1%)	182 (69.7%)	
Margin					<0.001
Smooth	203 (26.0%)	121 (46.4%)	66 (25.4%)	16 (6.1%)	
Lobulated	579 (74.0%)	140 (53.6%)	194 (74.6%)	245 (93.9%)	
Spiculation					<0.001
No	484 (61.9%)	194 (74.3%)	150 (57.7%)	140 (53.6%)	
Yes	298 (38.1%)	67 (25.7%)	110 (42.3%)	121 (46.4%)	
Pleural indentation					<0.001
No	235 (30.1%)	99 (37.9%)	45 (17.3%)	91 (34.9%)	
Yes	547 (69.9%)	162 (62.1%)	215 (82.7%)	170 (65.1%)	

Table S1 (continued)

Table S1 (continued)

Characteristics	Total (n=782)	Tertile 1 (n=261)	Tertile 2 (n=260)	Tertile 3 (n=261)	P value
Vascular convergence					0.018
No	572 (73.1%)	196 (75.1%)	174 (66.9%)	202 (77.4%)	
Yes	210 (26.9%)	65 (24.9%)	86 (33.1%)	59 (22.6%)	
Vacuolar sign					0.011
No	688 (88.0%)	240 (92.0%)	217 (83.5%)	231 (88.5%)	
Yes	94 (12.0%)	21 (8.0%)	43 (16.5%)	30 (11.5%)	
Air bronchogram					<0.001
No	454 (58.1%)	137 (52.5%)	123 (47.3%)	194 (74.3%)	
Yes	328 (41.9%)	124 (47.5%)	137 (52.7%)	67 (25.7%)	
Mean CT value (HU)	-370.4 (-472.6- -262.1)	-501.9 (-580.8- -414.6)	-347.0 (-428.4- -258.4)	-277.7 (-361.3- -175.7)	<0.001
D _{max} (mm)	26.0 (20.3-33.9)	20.6 (15.4-25.7)	26.9 (21.3-34.2)	31.5 (25.3-39.2)	<0.001
CTR	0.9 (0.7-1.0)	0.6 (0.0-0.8)	0.9 (0.7-1.0)	1.0 (1.0-1.0)	<0.001
Volume (mm ³)	6711.9 (3382.6-12929.1)	3329.3 (1702.1-6069.5)	7138.7 (4120.6-13337.9)	11405.0 (7028.0-23819.4)	<0.001
MTV (cm ³)	6.7 (3.4-12.9)	3.3 (1.7-6.1)	7.1 (4.1-13.4)	11.4 (7.0-23.9)	<0.001
TLG (g)	14.2 (5.2-40.8)	3.7 (1.8-6.8)	16.4 (8.4-29.5)	49.5 (23.4-123.3)	<0.001

The results are expressed as mean ± SD/median (Q1-Q3)/n (%). INMA, invasive non-mucinous adenocarcinoma; LUL, left upper lobe; LLL, left lower lobe; RUL, right upper lobe; RML, right middle lobe; RLL, right lower lobe; D_{max}, maximum tumor diameter; CTR, consolidation to tumor ratio; MTV, metabolic tumor volume; TLG, total lesion glycolysis; SUV index, tumor SUV_{max}/hepatic SUV_{mean}.

Table S2 Univariate logistic regression analysis of tumor characteristics and risk of Grade 3 lung INMA

Characteristics	Statistics	OR (95% CI)	P value
Age (years)	64.1±9.1	0.982 (0.965–0.999)	0.039
Gender			<0.001
Female	458 (58.6%)	1.0	
Male	324 (41.4%)	2.410 (1.741–3.337)	
Smoking history	241 (30.8%)	2.732 (1.958–3.813)	<0.001
TNM stage			<0.001
1	579 (74.0%)	1.0	
2	84 (10.7%)	3.961 (2.443–6.422)	
3	103 (13.2%)	6.746 (4.312–10.556)	
4	16 (2.1%)	15.094 (4.767–47.793)	
Location			
LUL	227 (29.0%)	1.0	
LLL	103 (13.2%)	1.283 (0.776–2.121)	0.332
RUL	242 (30.9%)	0.839 (0.555–1.268)	0.406
RML	70 (9.0%)	0.901 (0.490–1.658)	0.738
RLL	140 (17.9%)	0.710 (0.432–1.167)	0.177
Lesion type			<0.001
Subsolid	415 (53.1%)	1.0	
Solid	367 (46.9%)	10.099 (6.699–15.226)	
Shape			0.274
Round/quasi-round	237 (30.3%)	1.0	
Irregular	545 (69.7%)	0.826 (0.587–1.163)	
Margin			<0.001
Smooth	203 (26.0%)	1.0	
Lobulated	579 (74.0%)	3.772 (2.343–6.071)	
Spiculation			0.378
No	484 (61.9%)	1.0	
Yes	298 (38.1%)	1.158 (0.836–1.605)	
Pleural indentation			<0.001
No	235 (30.1%)	1.0	
Yes	547 (69.9%)	0.552 (0.394–0.772)	
Vascular convergence			0.05
No	572 (73.1%)	1.0	
Yes	210 (26.9%)	0.683 (0.467–0.997)	

Table S2 (continued)

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Characteristics	Statistics	OR (95% CI)	P value
Vacuolar sign			0.896
No	688 (88.0%)	1.0	
Yes	94 (12.0%)	0.968 (0.591–1.585)	
Air bronchogram			<0.001
No	454 (58.1%)	1.0	
Yes	328 (41.9%)	0.316 (0.220–0.456)	
Mean CT value (HU)	-370.4 (-472.6– -262.1)	1.006 (1.005–1.008)	<0.001
D _{max} (mm)	26.0 (20.3–33.9)	1.056 (1.039–1.074)	<0.001
CTR	0.9 (0.7–1.0)	1627.533 (307.476–8614.868)	<0.001
Volume (mm ³)	6711.9 (3382.6–12929.1)	1.000 (1.000–1.000)	<0.001
MTV (cm ³)	6.7 (3.4–12.9)	1.041 (1.028–1.053)	<0.001
TLG (g)	14.2 (5.2–40.8)	1.012 (1.008–1.015)	<0.001
SUV index	2.3 (1.1–4.7)	1.960 (1.775–2.164)	<0.001

The results are expressed as Mean ± SD/Median (Q1-Q3)/n (%). INMA, invasive non-mucinous adenocarcinoma; LUL, left upper lobe; LLL, left lower lobe; RUL, right upper lobe; RML, right middle lobe; RLL, right lower lobe; D_{max}, maximum tumor diameter; CTR, consolidation to tumor ratio; MTV, metabolic tumor volume; OR, odds ratio; CI, confidence interval; SUV, standardized uptake value; TLG, total lesion glycolysis; SUV index, tumor SUV_{max}/hepatic SUV_{mean}.