

Figure S1 Study inclusion flowchart. LUAD, lung adenocarcinoma.

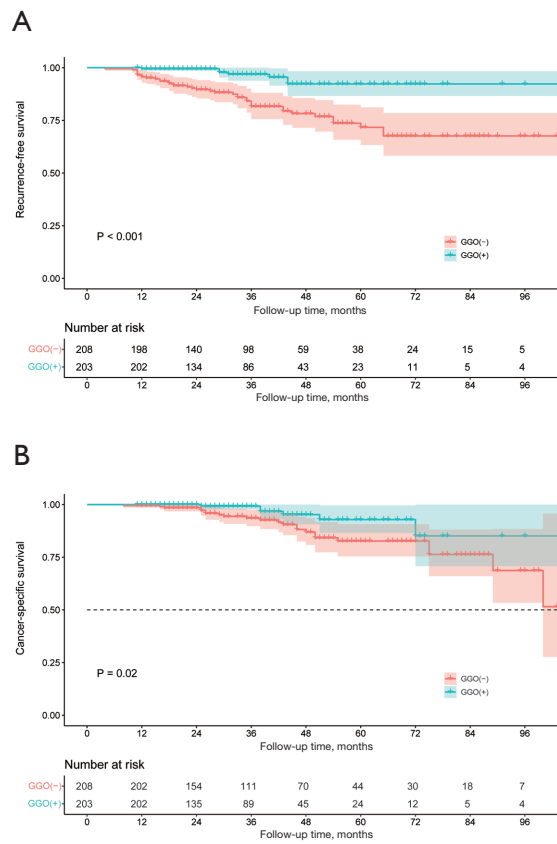


Figure S2 Association of GGO with (A) RFS and (B) CSS in patients with pathological stage IA3 LUAD. GGO, ground-glass opacity; RFS, recurrence-free survival; CSS, cancer-specific survival; LUAD, lung adenocarcinoma.

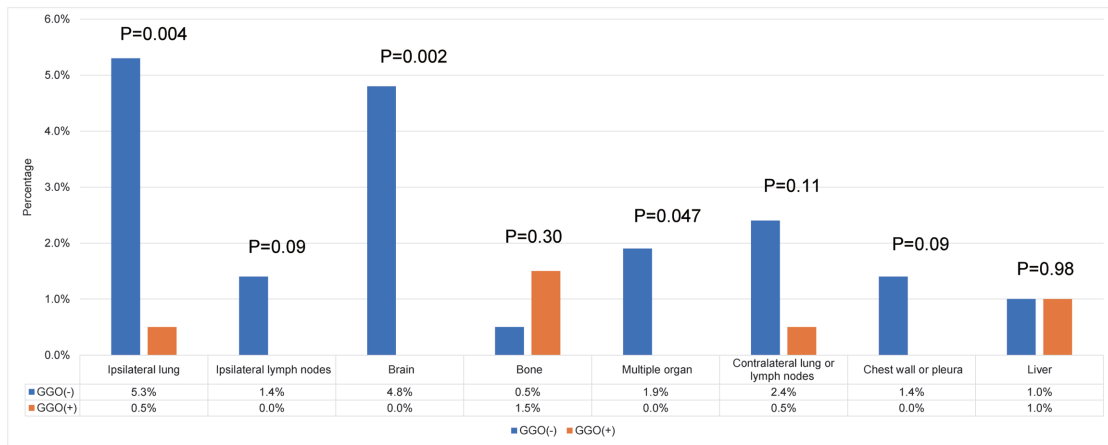


Figure S3 Recurrence patterns in patients with pathological stage IA3 LUAD based on the presence or absence of a GGO component. GGO, ground-glass opacity; LUAD, lung adenocarcinoma.

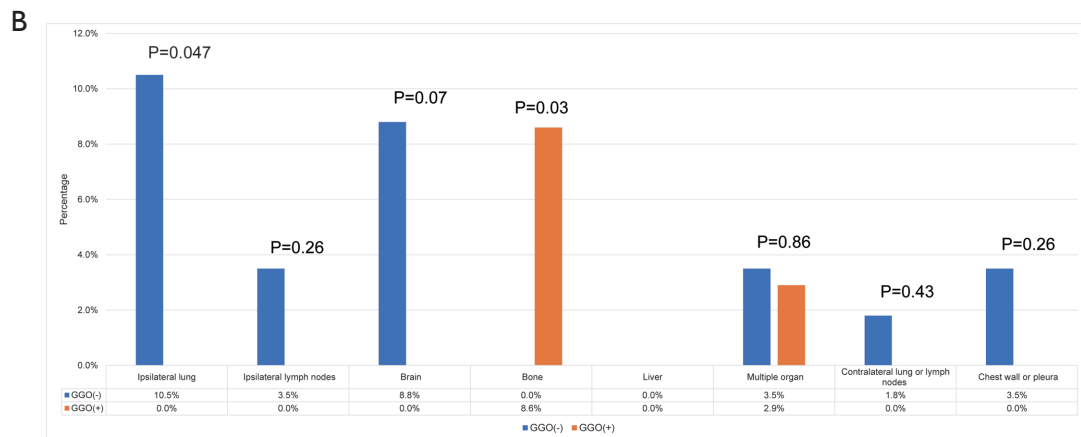
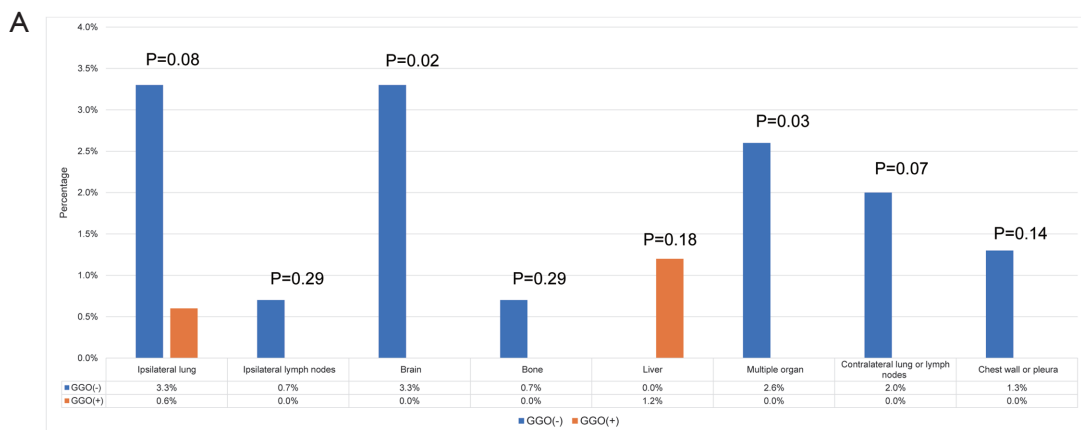


Figure S4 Association of GGO with recurrence pattern in patients with pathological stage IA3 LUAD according to MIP status [(A) MIP-positive patients; (B) MIP-negative patients]. GGO, ground-glass opacity; LUAD, lung adenocarcinoma; MIP, micropapillary.

Table S1 Univariate and multivariate analysis of prognostic factors affecting patients with pathological stage IA3 LUAD

Characteristics	RFS				CSS			
	Univariable		Multivariable		Univariable		Multivariable	
	HR (95% CI)	P value	HR (95% CI)	P value	HR (95% CI)	P value	HR (95% CI)	P value
Sex								
Female								
Male	2.733 (1.456–5.129)	0.002	1.608 (0.744–3.475)	0.23	5.792 (2.217–15.135)	<0.001	4.020 (1.377–11.736)	0.01
Age (years)								
<65								
≥65	1.099 (0.608–1.988)	0.76			1.300 (0.640–2.642)	0.47		
BMI (kg/m ²)	1.002 (0.903–1.112)	0.97			1.044 (0.920–1.184)	0.51		
Smoke history								
No								
Yes	2.843 (1.585–5.098)	<0.001	2.485 (1.200–5.144)	0.01	3.728 (1.849–7.516)	<0.001	2.112 (0.956–4.670)	0.07
Preoperative CEA (ng/mL)								
<5								
≥5	1.151 (0.636–2.080)	0.64			0.708 (0.333–1.504)	0.37		
Preoperative symptoms								
No								
Yes	1.034 (0.557–1.918)	0.92			0.726 (0.330–1.596)	0.43		
Tumor size (cm)	3.196 (0.951–10.739)	0.06			2.535 (0.518–12.396)	0.25		
Lymph node dissection	0.996 (0.960–1.034)	0.84			1.000 (0.957–1.045)	0.99		
MIP component								
<5%								
≥5%	3.163 (1.773–5.642)	<0.001	3.315 (1.830–6.003)	<0.001	3.306 (1.616–6.766)	0.001	3.723 (1.802–7.690)	<0.001
GGO component								
Absence								
Presence	0.200 (0.089–0.448)	<0.001	0.232 (0.103–0.522)	<0.001	0.319 (0.131–0.779)	0.01	0.397 (0.161–0.977)	0.04
EGFR mutation								
Negative								
Positive	0.954 (0.504–1.806)	0.89			1.565 (0.678–3.610)	0.29		

LUAD, lung adenocarcinoma; RFS, recurrence-free survival; CSS, cancer-specific survival; HR, hazard ratio; CI, confidence interval; BMI, body mass index; CEA, carcinoembryonic antigen; GGO, ground-glass opacity; EGFR, epidermal growth factor receptor.

Table S2 Univariate and multivariate analysis of prognostic factors affecting MIP-positive patients with pathological stage IA3 LUAD

Characteristics	RFS				CSS			
	Univariable		Multivariable		Univariable		Multivariable	
	HR (95% CI)	P value	HR (95% CI)	P value	HR (95% CI)	P value	HR (95% CI)	P value
Sex								
Female								
Male	2.061 (0.876–4.851)	0.10			5.539 (1.560–19.673)	0.008	3.438 (0.812–14.566)	0.09
Age (years)								
<65								
≥65	0.764 (0.297–1.967)	0.58			1.080 (0.366–3.187)	0.89		
BMI (kg/m ²)	1.169 (1.038–1.315)	0.01	1.084 (0.934–1.259)	0.29	1.171 (1.018–1.347)	0.03	1.101 (0.965–1.255)	0.15
Smoke history								
No								
Yes	2.774 (1.153–6.669)	0.02	2.243 (0.754–6.674)	0.15	4.196 (1.491–11.811)	0.007	2.023 (0.625–6.549)	0.24
Preoperative CEA (ng/mL)								
<5								
≥5	0.660 (0.258–1.693)	0.39			0.284 (0.064–1.261)	0.10		
Preoperative symptoms								
No								
Yes	0.372 (0.125–1.104)	0.08			0.451 (0.127–1.603)	0.22		
Tumor size (cm)	9.618 (1.554–59.536)	0.02	8.764 (1.387–55.372)	0.02	5.017 (0.546–46.090)	0.15		
Lymph node dissection	1.027 (0.976–1.080)	0.31						
GGO component								
Absence								
Presence	0.391 (0.132–1.157)	0.09			0.801 (0.252–2.541)	0.71		
EGFR mutation								
Negative								
Positive	1.080 (0.390–2.987)	0.88			1.407 (0.367–5.393)	0.62		

MIP, micropapillary; LUAD, lung adenocarcinoma; RFS, recurrence-free survival; CSS, cancer-specific survival; HR, hazard ratio; CI, confidence interval; BMI, body mass index; CEA, carcinoembryonic antigen; GGO, ground-glass opacity; *EGFR*, epidermal growth factor receptor.