

Supplementary

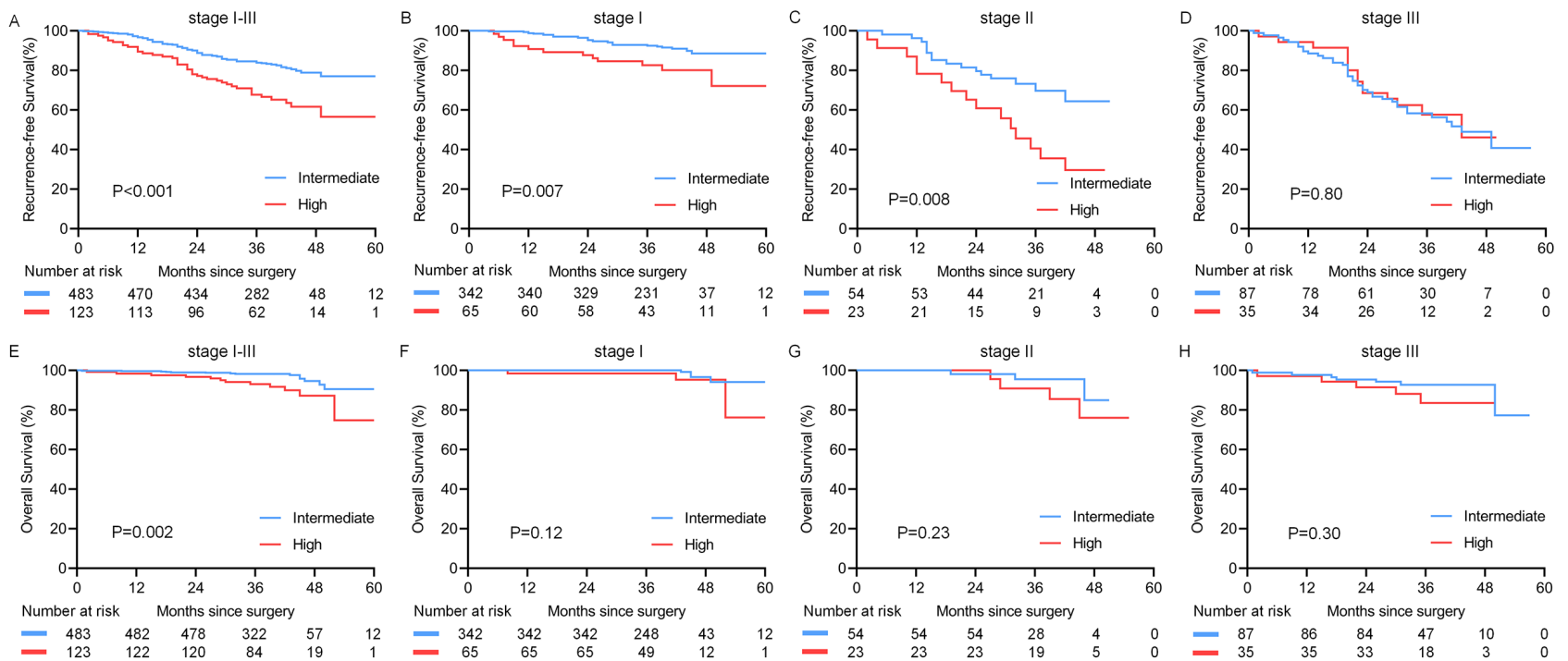


Figure S1 RFS and OS curves for the architectural grading system stratified by intermediate grade and high grade. RFS for stages I–III patients (A), stage I patients (B), stage II patients (C), and stage III patients (D); OS for stages I–III patients (E), stage I patients (F), stage II patients (G), and stage III patients (H). RFS, recurrence-free survival; OS, overall survival.

Table S1 Univariable and multivariate analysis of RFS and OS using Cox proportional hazards models in patients classified by architectural grade

Variables	RFS				OS			
	Univariate analysis		Multivariate analysis		Univariate analysis		Multivariate analysis	
	HR (95% CI)	P value	HR (95% CI)	P value	HR (95% CI)	P value	HR (95% CI)	P value
Nodule type on CT (solid/part solid)	4.564 (2.317–8.991)	<0.001*	2.458 (1.218–4.961)	0.01*	32.357 (0.737–142.139)	0.02*	12.046 (0.023–42.176)	0.69
CEA level (>5/≤5 ng/mL)	1.006 (1.002–1.011)	0.006*	1.002 (0.997–1.007)	0.55	1.006 (0.995–1.017)	0.28		
Pathologic TNM stage								
Stage I	Ref.		Ref.		Ref.		Ref.	
Stage II	4.793 (3.017–7.613)	<0.001*	3.716 (2.311–5.974)	<0.001*	5.829 (2.038–16.672)	0.001*	4.678 (1.603–13.652)	0.005*
Stage III	5.478 (3.670–8.175)	<0.001*	3.870 (2.542–5.890)	<0.001*	6.940 (2.718–17.723)	<0.001*	6.311 (2.452–16.238)	<0.001*
Pleural invasion (present/absent)	2.498 (1.765–3.536)	<0.001*	1.557 (1.088–2.227)	0.01*	3.311 (1.522–7.199)	0.003*	1.997 (0.892–4.473)	0.09
Lymphovascular invasion (present/absent)	1.635 (1.049–2.548)	0.03*	0.880 (0.546–1.419)	0.60	1.213 (0.418–3.520)	0.72		
ACT (yes/no)	2.112 (1.441–3.097)	<0.001*	1.257 (0.835–1.892)	0.27	2.340 (0.977–5.606)	0.06		
Architectural grade (high/intermediate)	2.144 (1.486–3.092)	<0.001*	1.537 (1.061–2.227)	0.02*	3.129 (1.445–6.776)	0.004*	2.345 (1.066–5.161)	0.03*

*, P<0.05. RFS, recurrence-free survival; OS, overall survival; HR, hazard ratio; CI, confidence interval; CT, computed tomography; CEA, carcinoembryonic antigen; TNM, tumor-node-metastasis; ref., reference; ACT, adjuvant chemotherapy.

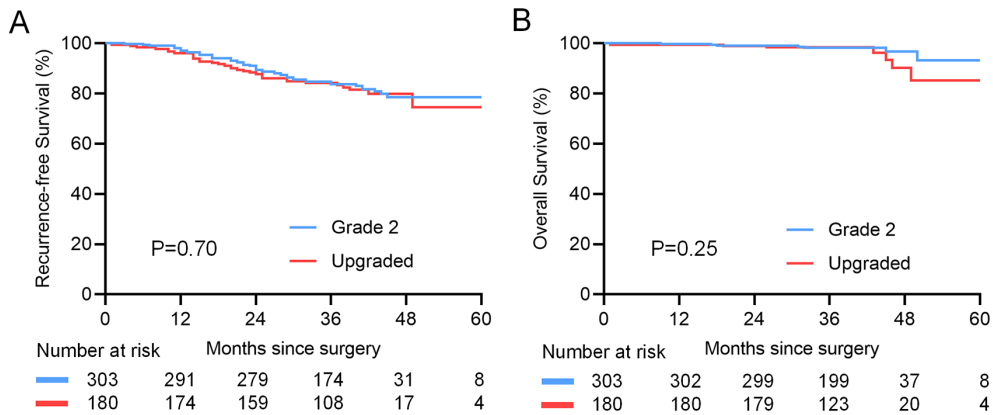


Figure S2 RFS (A) and OS (B) curves of patients who were graded as architectural intermediate grade and those upgraded to IASLC grade 3. RFS, recurrence-free survival; OS, overall survival; IASLC, International Association for the Study of Lung Cancer.

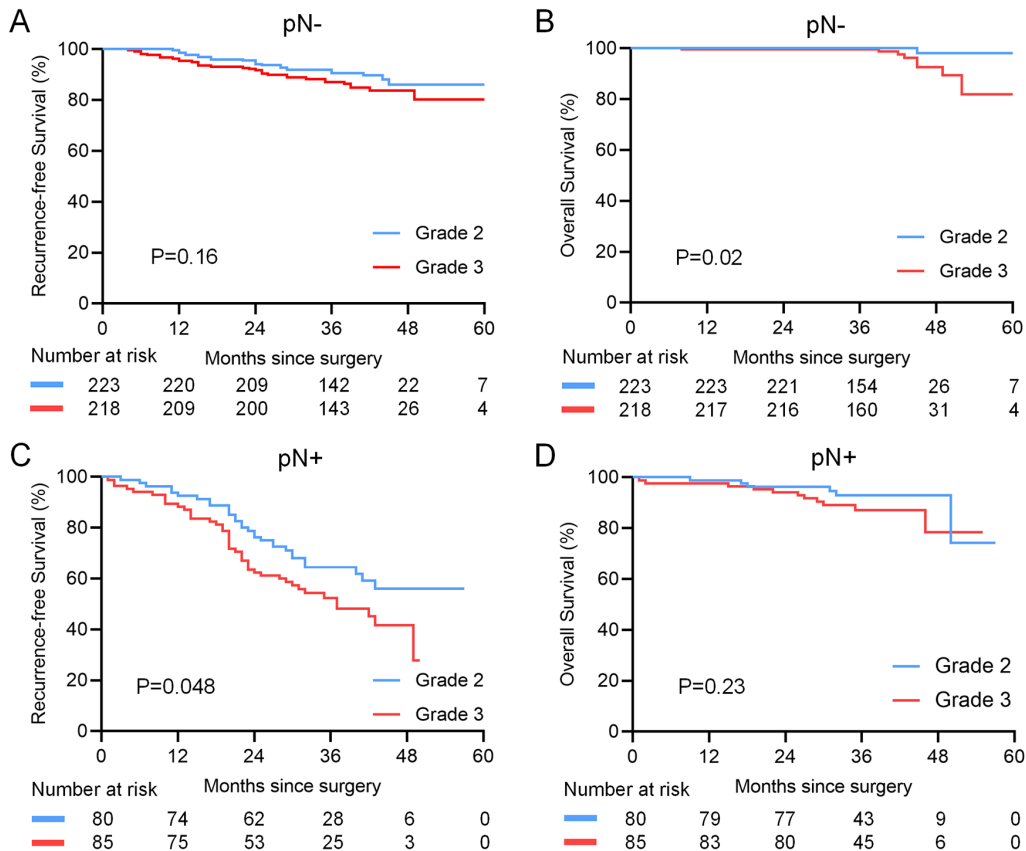


Figure S3 Survival curves per the IASLC grading system in pN- group [(A) for RFS and (B) for OS] and pN+ group [(C) for RFS and (D) for OS]. pN-, pathologic nodal negative; pN+, pathologic nodal positive; IASLC, International Association for the Study of Lung Cancer; RFS, recurrence-free survival; OS, overall survival.

Table S2 Logistic regression analysis of preoperative characteristics associated with IASLC grade 3

Variables	Univariate analysis		Multivariate analysis	
	HR (95% CI)	P value	HR (95% CI)	P value
Maximum tumor diameter (mm)	1.002 (0.989–1.016)	0.73		
Maximum solid component diameter (mm)	1.008 (0.994–1.021)	0.26		
Lymphadenopathy (present/absent)	0.985 (0.698–1.389)	0.93		
Nodule type (solid/part solid)	1.941 (1.309–2.878)	0.001*	1.884 (1.267–2.800)	0.002*
Location (central /peripheral)	1.498 (0.827–2.711)	0.18		
Margin				
Smooth	Ref.			
Lobulated	1.024 (0.673–1.559)	0.91		
Spiculated	0.991 (0.594–1.654)	0.97		
Irregular	0.850 (0.530–1.365)	0.50		
Shape (irregular/round to oval)	0.837 (0.605–1.158)	0.28		
Pseudocavity (present/absent)	0.608 (0.395–0.937)	0.02*	0.640 (0.414–0.991)	0.045*
Calcification (present/absent)	0.658 (0.265–1.632)	0.37		
Central low-attenuation (present/absent)	1.209 (0.738–1.980)	0.45		
Air bronchogram (present/absent)	0.819 (0.563–1.190)	0.30		
Satellite lesions (present/absent)	0.396 (0.076–2.057)	0.27		
Pleural retraction (present/absent)	0.772 (0.542–1.099)	0.15		
Clinical nodal status (positive/negative)	2.725 (1.871–3.969)	<0.001*	2.136 (1.314–3.470)	0.002*
SUV _{max}	1.006 (0.958–1.056)	0.82		

*, P<0.05. IASLC, International Association for the Study of Lung Cancer; HR, hazard ratio; CI, confidence interval; ref., reference; SUV_{max}, maximum standardized uptake value.