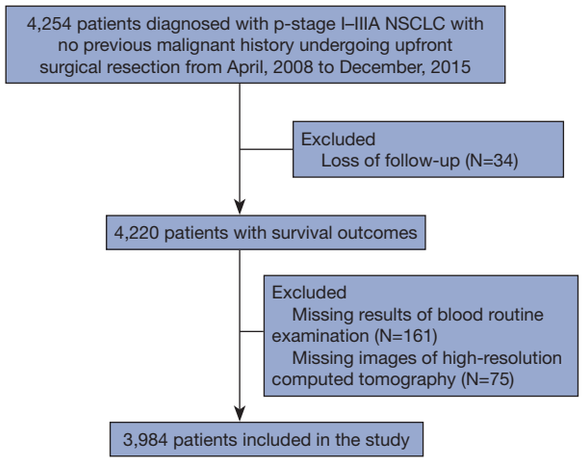

Figure S1 The workflow of this study. NSCLC, non-small cell lung cancer.

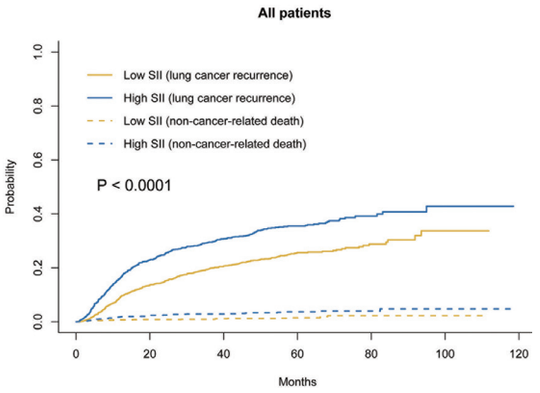

Figure S2 Cumulative recurrence rate according to the level of SII using competing risk analyses. High SII was defined as more than 479, while low SII as no more than 479. SII, systemic immune-inflammation index.

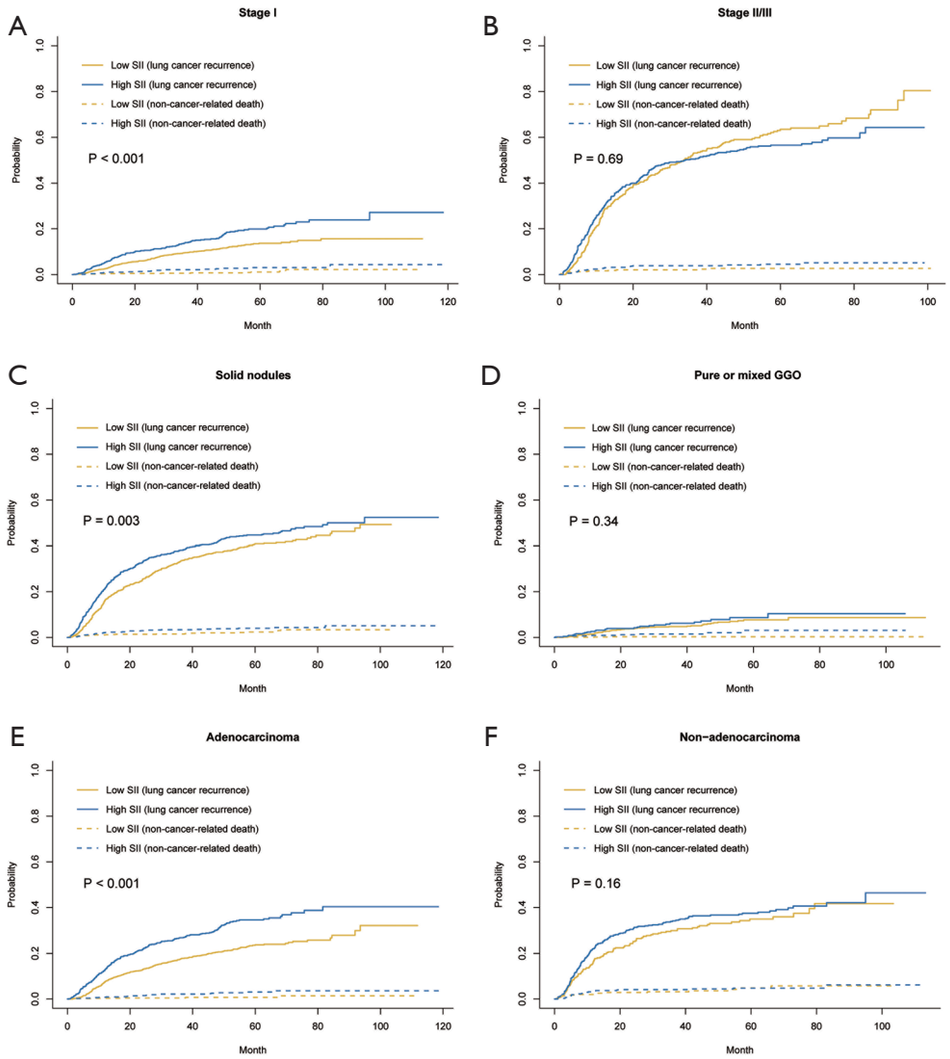

Figure S3 Cumulative recurrence rate according to the level of SII using competing risk analyses in patients with stage I disease (A), stage II/III disease (B), solid nodules (C), pure or mixed GGO (D), adenocarcinoma (E), or none adenocarcinoma (F). High SII was defined as more than 479, while low SII as no more than 479. SII, systemic immune-inflammation index; GGO, ground-glass opacity.

© Translational Lung Cancer Research. All rights reserved.
https://dx.doi.org/10.21037/tlcr-21-267

Table S1 Univariate and multivariable Cox regression analysis of factors associated with RFS after multiple imputation (n=4,220)

Variables	Univariate		Multivariate	
	HR (95% CI)	P	HR (95% CI)	P
Age	1.014 (1.008, 1.021)	<0.001	1.009 (1.002, 1.016)	0.012
Sex (male *vs.* female)	1.821 (1.600, 2.074)	<0.001	1.196 (1.002, 1.427)	0.047
Smoking history	1.677 (1.483, 1.897)	<0.001	1.119 (0.946, 1.324)	0.190
GGO components (absence *vs.* presence)	6.916 (5.651, 8.465)	<0.001	3.139 (2.491, 3.955)	<0.001
SII (high *vs.* low)	1.647 (1.457, 1.863)	<0.001	1.151 (1.012, 1.309)	0.032
p-TNM stage		<0.001		<0.001
0/I	Reference		Reference	
II	3.812 (3.207, 4.531)	<0.001	2.308 (1.870, 2.850)	<0.001
III	8.444 (7.335, 9.720)	<0.001	4.527 (3.710, 5.523)	<0.001
Histology		<0.001		<0.001
Non-MPA/SPA adenocarcinoma	Reference		Reference	
MPA/SPA	3.165 (2.663, 3.761)	<0.001	1.211 (1.012, 1.450)	0.037
SQCC	1.832 (1.573, 2.134)	<0.001	0.746 (0.625, 0.890)	0.001
Others	2.799 (2.245, 3.489)	<0.001	1.221 (0.968, 1.540)	0.092
LVI (presence *vs.* absence)	3.521 (3.052, 4.062)	<0.001	1.284 (1.102, 1.497)	0.001
VPI (presence *vs.* absence)	2.410 (2.110, 2.753)	<0.001	1.502 (1.308, 1.725)	<0.001
Adjuvant chemotherapy (yes *vs.* no)	4.127 (3.636, 4.684)	<0.001	0.912 (0.763, 1.090)	0.312
Adjuvant radiotherapy (yes *vs.* no)	4.799 (3.945, 5.837)	<0.001	1.627 (1.323, 2.002)	<0.001

RFS, recurrence-free survival; HR, hazard ratio; CI, Confidence interval; GGO, ground-glass opacity; SII, systemic immune-inflammation index; MPA, micropapillary pattern-predominant adenocarcinoma; SPA, solid pattern-predominant adenocarcinoma; SQCC, squamous cell carcinoma; LVI, lymphovascular invasion; VPI, visceral pleural invasion.

Table S2 Univariate and multivariable Cox regression analysis of factors associated with OS (n=3,984)

Variables	Univariate		Multivariate	
	HR (95% CI)	P	HR (95% CI)	P
Age	1.035 (1.025, 1.045)	<0.001	1.029 (1.018, 1.039)	<0.001
Sex (male *vs.* female)	2.156 (1.772, 2.623)	<0.001	1.275 (0.979, 1.661)	0.071
Smoking history	1.929 (1.613, 2.307)	<0.001	1.144 (0.898, 1.457)	0.278
GGO components (absence *vs.* presence)	11.185 (7.584, 16.494)	<0.001	4.111 (2.685, 6.294)	<0.001
SII (high *vs.* low)	1.841 (1.540, 2.202)	<0.001	1.227 (1.018, 1.480)	0.032
p-TNM stage		<0.001		<0.001
0/I	Reference		Reference	
II	3.672 (2.819, 4.782)	<0.001	2.334 (1.719, 3.170)	<0.001
III	8.344 (6.789, 10.255)	<0.001	5.644 (4.280, 7.444)	<0.001
Histology		<0.001		0.008
Non-MPA/SPA adenocarcinoma	Reference		Reference	
MPA/SPA	3.152 (2.433, 4.083)	<0.001	1.309 (1.002, 1.708)	0.048
SQCC	2.626 (2.120, 3.252)	<0.001	1.097 (0.856, 1.406)	0.462
Others	3.854 (2.881, 5.156)	<0.001	1.627 (1.195, 2.216)	0.002
LVI (presence *vs.* absence)	2.884 (2.344, 3.548)	<0.001	1.083 (0.868, 1.351)	0.480
VPI (presence *vs.* absence)	2.236 (1.847, 2.707)	<0.001	1.512 (1.240, 1.842)	<0.001
Adjuvant chemotherapy (yes *vs.* no)	3.297 (2.747, 3.956)	<0.001	0.685 (0.536, 0.875)	0.002
Adjuvant radiotherapy (yes *vs.* no)	3.826 (2.901, 5.046)	<0.001	1.389 (1.038, 1.860)	0.027

OS, overall survival; HR, hazard ratio; CI, confidence interval; GGO, ground-glass opacity; SII, systemic immune-inflammation index; MPA, micropapillary pattern-predominant adenocarcinoma; SPA, solid pattern-predominant adenocarcinoma; SQCC, squamous cell carcinoma; LVI, lymphovascular invasion; VPI, visceral pleural invasion.

© Translational Lung Cancer Research. All rights reserved.
https://dx.doi.org/10.21037/tlcr-21-267

Table S3 HRs of SII on RFS stratified by different clinicopathological factors after multiple imputation (n=4,220)

Variables	HR	95% CI		P value
		Lower	Upper	
Age				
≤60	1.651	1.385	1.969	<0.001
>60	1.622	1.366	1.927	<0.001
Sex				
Male	1.405	1.207	1.635	<0.001
Female	1.770	1.430	2.190	<0.001
Smoking history				
Never	1.653	1.388	1.969	<0.001
Ever	1.401	1.175	1.672	<0.001
p-TNM stage				
0/I	1.565	1.266	1.934	<0.001
II/III	0.995	0.854	1.158	0.947
GGO components				
Absence	1.237	1.086	1.408	0.001
Presence	1.386	0.926	2.073	0.113
Histology				
Adenocarcinoma	1.665	1.431	1.937	<0.001
Non-adenocarcinoma	1.243	0.997	1.550	0.054
LVI				
Absence	1.677	1.455	1.933	<0.001
Presence	1.270	0.992	1.625	0.058
VPI				
Absence	1.645	1.419	1.908	<0.001
Presence	1.561	1.251	1.947	<0.001

HR, hazard ratio; SII, systemic immune-inflammation index; RFS, recurrence-free survival; CI, confidence interval; GGO, ground-glass opacity; LVI, lymphovascular invasion; VPI, visceral pleural invasion.

© Translational Lung Cancer Research. All rights reserved.
https://dx.doi.org/10.21037/tlcr-21-267