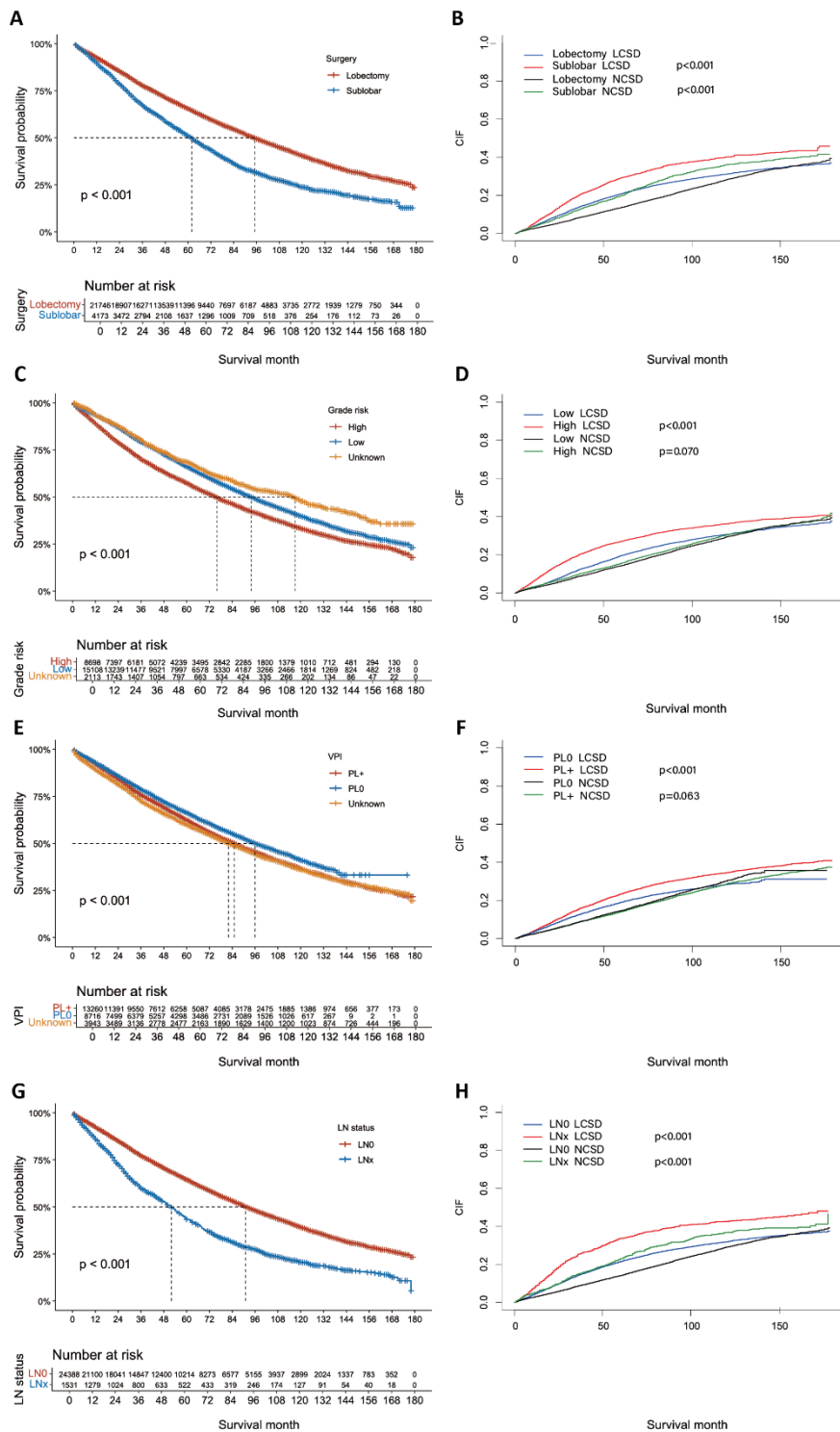


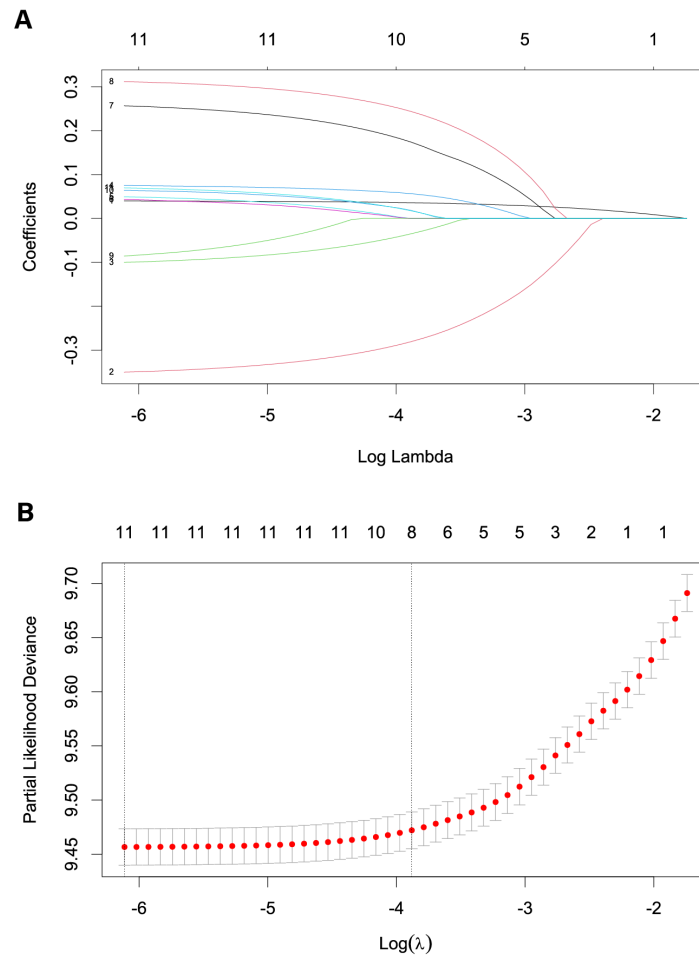
**Table S1** Characteristics of patients after PSM

Characteristic	Overall (N=10,212)	None (N=6,808)	Adjuvant (N=3,404)	P value
Age (years) <sup>†</sup>	66 [59, 72]	66 [59, 73]	66 [60, 72]	0.12
Sex				>0.9
Female	4,813 (47.13)	3,206 (47.09)	1,607 (47.21)	
Male	5,399 (52.87)	3,602 (52.91)	1,797 (52.79)	
Race				0.5
White	8,291 (81.19)	5,544 (81.43)	2,747 (80.70)	
Black	1,004 (9.83)	668 (9.81)	336 (9.87)	
Asian and others	917 (8.98)	596 (8.75)	321 (9.43)	
Histology				>0.9
ADC	6,828 (66.86)	4,562 (67.01)	2,266 (66.57)	
SCC	2,222 (21.76)	1,476 (21.68)	746 (21.92)	
Others	1,162 (11.38)	770 (11.31)	392 (11.52)	
Grade risk				0.2
Low	5,216 (51.08)	3,512 (51.59)	1,704 (50.06)	
High	4,235 (41.47)	2,780 (40.83)	1,455 (42.74)	
Unknown	761 (7.45)	516 (7.58)	245 (7.20)	
Stage				0.9
IB	6,903 (67.60)	4,606 (67.66)	2,297 (67.48)	
IIA	3,309 (32.40)	2,202 (32.34)	1,107 (32.52)	
Surgery				0.4
Lobectomy	8,923 (87.38)	5,961 (87.56)	2,962 (87.02)	
Sublobar	1,289 (12.62)	847 (12.44)	442 (12.98)	
LN status				0.11
N0	9,637 (94.37)	6,407 (94.11)	3,230 (94.89)	
Nx	575 (5.63)	401 (5.89)	174 (5.11)	
Tumor size (mm)				0.6
≤30	3,475 (34.03)	2,337 (34.33)	1,138 (33.43)	
(30, 40]	3,428 (33.57)	2,269 (33.33)	1,159 (34.05)	
>40	3,309 (32.40)	2,202 (32.34)	1,107 (32.52)	
Visceral pleural involvement				0.5
PL0	3,373 (33.03)	2,241 (32.92)	1,132 (33.25)	
PL+	5,328 (52.17)	3,541 (52.01)	1,787 (52.50)	
Unknown	1,511 (14.80)	1,026 (15.07)	485 (14.25)	
High-risk feature				0.11
0	2,533 (24.80)	1,722 (25.29)	811 (23.82)	
≥1	7,679 (75.20)	5,086 (74.71)	2,593 (76.18)	

Data are presented as median [Q1, Q3] or n (%). <sup>†</sup>, continuous variable: Wilcoxon rank sum test; categorical variable: Pearson's Chi-squared test.



**Figure S1** Kaplan-Meier survival curves of OS and cumulative incidence of mortality [lung cancer-specific death (LCSD) and non-lung cancer-specific death (NCSD)] stratified by surgical procedure (A,B), tumor grade (C,D), visceral pleural involvement (E,F), and lymph node dissection status (G,H) in surgically resected stage IB-IIA NSCLC.



**Figure S2** Variables selection with the least absolute shrinkage and selection operator (LASSO). LASSO Cox regression model was built with clinicopathologic characteristics. (A) The process of variable selection and resulting variables with nonzero coefficients were indicated in the plot. (B) Red dots indicated average deviance values for each model with a given  $\lambda$ ; the dotted vertical lines were drawn at the optimal values by using the minimum mean square error criteria.