



**Figure S1** The cumulative incidences of cancer-specific mortality in NSCLC in age (A), gender (B), ethnicity (C), primary site (D), T stage (E), N stage (F), M stage (G), surgery type (H), LN count (I). CIF, cumulative incidence function; NSCLC, non-small-cell lung cancer; LN, lymph node.

**Table S1** Characteristics comparison between training set and testing set

Variables	Overall (n=1,251)	Training set (n=876)	Testing set (n=375)	P
Age, years, n (%)				0.635
<65	491 (39.25)	339 (38.70)	152 (40.53)	
65-74	472 (37.73)	338 (38.58)	134 (35.73)	
≥75	288 (23.02)	199 (22.72)	89 (23.73)	
Primary site, n (%)				0.106
Upper lobe	810 (64.75)	577 (65.87)	233 (62.13)	
Middle lobe	78 (6.24)	45 (5.14)	33 (8.80)	
Lower lobe	316 (25.26)	220 (25.11)	96 (25.60)	
Main bronchus	30 (2.40)	20 (2.28)	10 (2.67)	
Overlapping lesion	17 (1.36)	14 (1.60)	3 (0.80)	
N stage, n (%)				0.188
N0	587 (46.92)	428 (48.86)	159 (42.40)	
N1	126 (10.07)	83 (9.47)	43 (11.47)	
N2	382 (30.54)	257 (29.34)	125 (33.33)	
N3	156 (12.47)	108 (12.33)	48 (12.80)	
M stage, n (%)				0.620
M0	967 (77.30)	681 (77.74)	286 (76.27)	
M1	284 (22.70)	195 (22.26)	89 (23.73)	
Surgery type, n (%)				0.481
No surgery of primary site	536 (42.85)	368 (42.01)	168 (44.80)	
Excision or resection of less than one lobe	91 (7.27)	62 (7.08)	29 (7.73)	
Lobe or bilobectomy extended	41 (3.28)	28 (3.20)	13 (3.47)	
Resection of at least one lobe or bilobectomy	532 (42.53)	41 (4.68)	10 (2.67)	
Pneumonectomy	51 (4.08)	377 (43.04)	155 (41.33)	
Tumor size, mm, M (Q <sub>1</sub> , Q <sub>3</sub> )	35.00 (21.00, 52.00)	35.00 (22.00, 54.25)	33.00 (20.50, 50.00)	0.167
LN count, n (%)				1.000
<16	1,064 (85.05)	745 (85.05)	319 (85.07)	
≥16	187(14.95)	131 (14.95)	56 (14.93)	
Follow-up time, months, M (Q <sub>1</sub> , Q <sub>3</sub> )	26.00 (8.00, 55.00)	26.00 (9.00, 55.00)	25.00 (8.00, 55.00)	0.567
Outcome, n (%)				0.632
Censored	445 (35.57)	319 (36.42)	126 (33.60)	
Dead from NSCLC	678 (54.20)	469 (53.54)	209 (55.73)	
Dead from other causes	128 (10.23)	88 (10.05)	40 (10.67)	

M (Q<sub>1</sub>, Q<sub>3</sub>), median and interquartile range; LNs, lymph nodes; NSCLC, non-small-cell lung cancer.