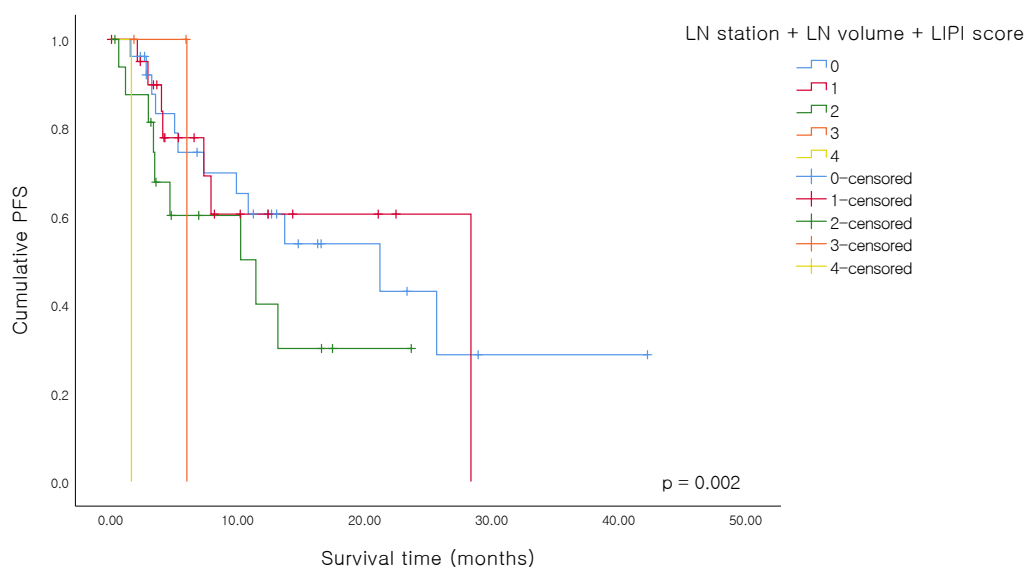


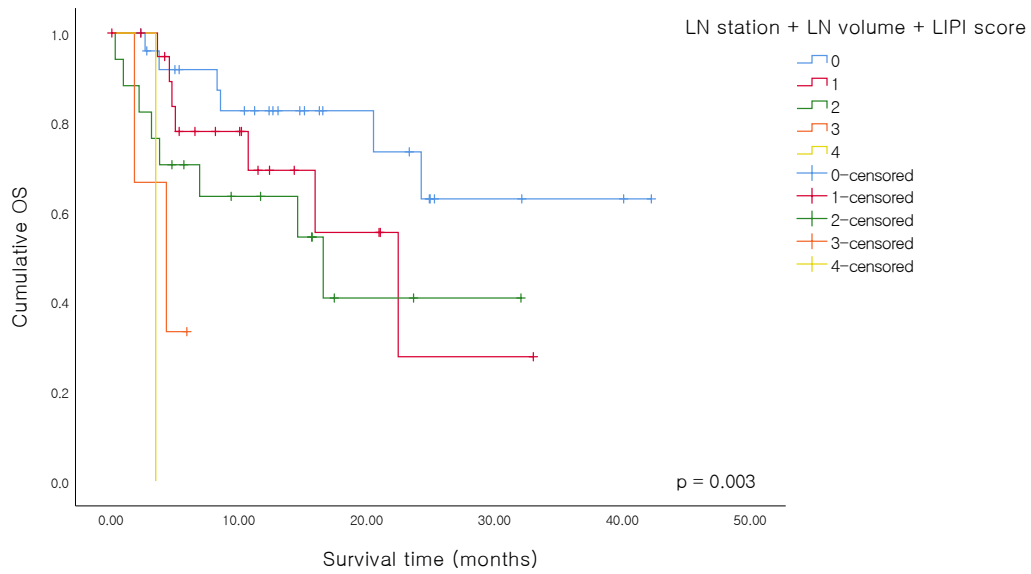
LN station + LN volume + LIPI score

	=		+		+	
		LN station		LN volume		LIPI
		Single = 0 Multi = 1	+	Non-bulky = 0 Bulky = 1	+	0, 1, or 2

**Figure S1** Definition of the combinatorial scores. LN, lymph node; LIPI, lung immune prognostic index.



**Figure S2** Kaplan-Meier curve for PFS comparison according to the combinatorial scoring system. PFS, progression free survival; LN, lymph node; LIPI, lung immune prognostic index.



**Figure S3** Kaplan-Meier curve for OS comparison according to the combinatorial scoring system. OS, overall survival; LN, lymph node; LIPI, lung immune prognostic index.

**Table S1** Baseline characteristics of clinical N2 subgroup (n=93)

Variables	Results
Age, median [IQR]	68 (61-75)
Sex, n (%)	
Male	71 (76.3)
Female	22 (23.7)
Smoking habit, n (%)	
Smoker or ex-smoker	78 (83.9)
Never smoker	15 (16.1)
Height, cm (mean ± SD)	162.65±7.53
Weight, kg, median [IQR]	59.80 (53.10-66.70)
ECOG, n (%)	
0-1	88 (94.6)
2-4	5 (5.4)
Stage at diagnosis (Clinical), n (%)	
IIIA	40 (43.0)
IIIB	53 (57.0)
T stage (Clinical), n (%)	
T1	15 (16.1)
T2a	12 (12.9)
T2b	12 (12.9)
T3	17 (18.3)
T4	36 (38.7)
LN station	
Single	40 (43.0)
Multi	35 (37.6)
LN volume	
Non-bulky	63 (67.7)
Bulky	12 (12.9)
Pathology type, n (%)	
Adenocarcinoma	33 (33.5)
Squamous	56 (60.2)
Adenosquamous	0 (0.0)
NSCLC NOS	4 (4.3)
Driver mutations	
EGFR	10/92
ALK	4/85
ROS1	0/62
PD-L1 expressions (22C3, SP263, SP142)†	56/88
LIPI	
0/1/2	60 (64.5)/21 (22.6)/7 (7.5)
First-line treatment, n (%)	
Surgery	23 (24.7)
Chemotherapy	23 (24.7)
CCRT + Durvalumab	15 (16.1)
CCRT	23 (24.7)
RT alone	2 (2.2)
Only diagnosis	7 (7.5)

†, positive PD-L1 expression was defined as at least one positive finding; 22C3 ≥50%, SP263 ≥10%, or SP142 TC ≥5% or IC ≥5%. ECOG, Eastern Cooperative Oncology Group; LN, lymph node; NSCLC NOS, non-small cell lung cancer not otherwise specified; EGFR, epidermal growth factor receptor; ALK, anaplastic lymphoma kinase; ROS1, c-Ros oncogene 1; PD-L1, programmed death-ligand 1; LIPI, lung immune prognostic index; CCRT, concurrent chemoradiation therapy; RT, radiotherapy.

**Table S2** Univariate and multivariate Cox regression analysis on OS in clinical N2 subgroup (n=93)

	Univariate		Multivariate	
	HR (95% CI)	P value	HR (95% CI)	P value
Age	1.070 (1.018-1.126)	0.008	1.036 (0.970-1.106)	0.297
Sex, male	4.150 (1.250-13.773)	0.020	8.983 (1.013-79.625)	0.049
Smoking, ever	4.264 (1.009-18.024)	0.049	0.676 (0.045-10.197)	0.777
ECOG, 2-4 vs. 0-1	12.297 (3.397-44.519)	<0.001	11.903 (2.057-68.874)	0.006
FVC (L)	1.167 (0.744-1.832)	0.501		
FEV1 (L)	1.169 (0.639-2.138)	0.612		
DLCO (L)	0.841 (0.753-0.939)	0.002	0.859 (0.713-1.037)	0.113
Cancer type				
Adenocarcinoma	1 (ref)	0.017	1 (ref)	0.403
Squamous	4.162 (1.567-11.053)	0.004	2.873 (0.619-13.339)	0.178
NSCLC NOS	3.330 (0.378-29.299)	0.278	NA	0.990
LN station + LN volume + LIPI score				
0	1 (ref)	0.018	1 (ref)	0.016
1	2.076 (0.685-6.291)	0.196	2.768 (0.614-12.481)	0.185
2	2.991 (1.022-8.749)	0.045	9.498 (2.200-41.011)	0.003
3	9.676 (1.793-52.231)	0.008	20.083 (2.454-164.356)	0.005
4	22.156 (2.311-212.365)	0.007	26.554 (0.943-747.381)	0.054
Positive driver mutations†	0.025 (0.000-1.497)	0.077		

†, at least one positive result among three mutation studies; EGFR, ALK, or ROS1. ECOG, Eastern Cooperative Oncology Group; FVC, forced vital capacity; FEV1, forced expiratory volume in the first second; DLCO, diffuse capacity for carbon monoxide; NSCLC NOS, non-small cell lung cancer not otherwise specified; LN, lymph node; LIPI, lung immune prognostic index.