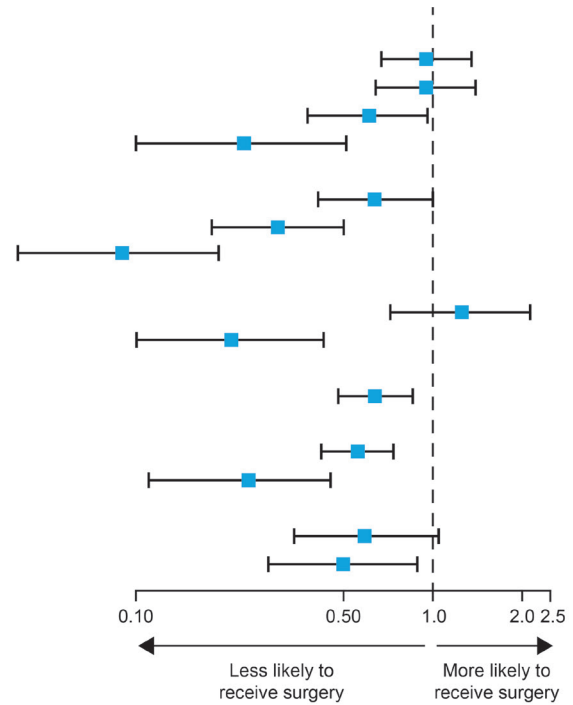


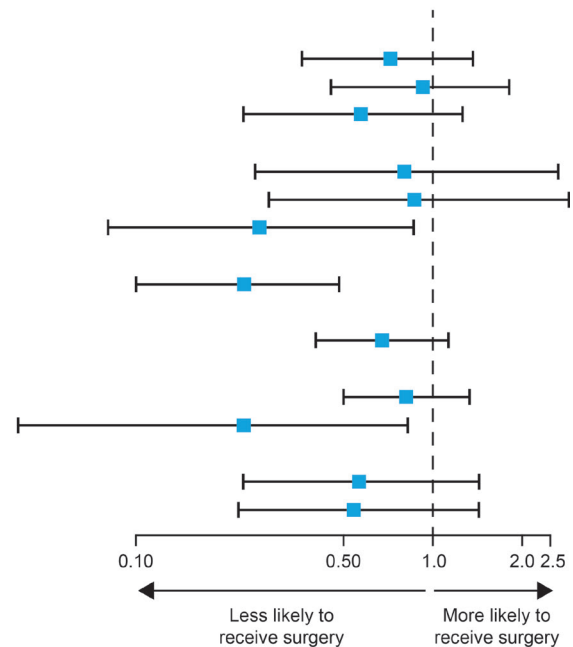
**A. Stage IIIA NSCLC**

Covariate at diagnosis	Subgroup	OR	95% CI		P value
<b>Age, years</b>	<65 (reference)				
	65–69	0.95	0.67	1.35	0.769
	70–74	0.95	0.64	1.40	0.790
	75–79	0.61	0.38	0.96	0.036
	≥80	0.23	0.10	0.51	0.001
<b>T staging</b>	T1 (reference)				
	T2	0.64	0.41	1.00	0.050
	T3	0.30	0.18	0.50	<0.001
	T4	0.09	0.04	0.19	<0.001
<b>N staging</b>	N0 (reference)				
	N1	1.25	0.72	2.13	0.425
	≥N2	0.21	0.10	0.43	<0.001
<b>Histology</b>	NSQ <sup>†</sup> (reference)				
	SQ	0.64	0.48	0.86	0.003
<b>ECOG PS</b>	0 (reference)				
	1	0.56	0.42	0.74	<0.001
	≥2	0.24	0.11	0.45	<0.001
<b>Smoking status</b>	Never smoked (reference)				
	Former smoker	0.59	0.34	1.05	0.072
	Active smoker	0.50	0.28	0.89	0.020



**B. Stage IIIB NSCLC**

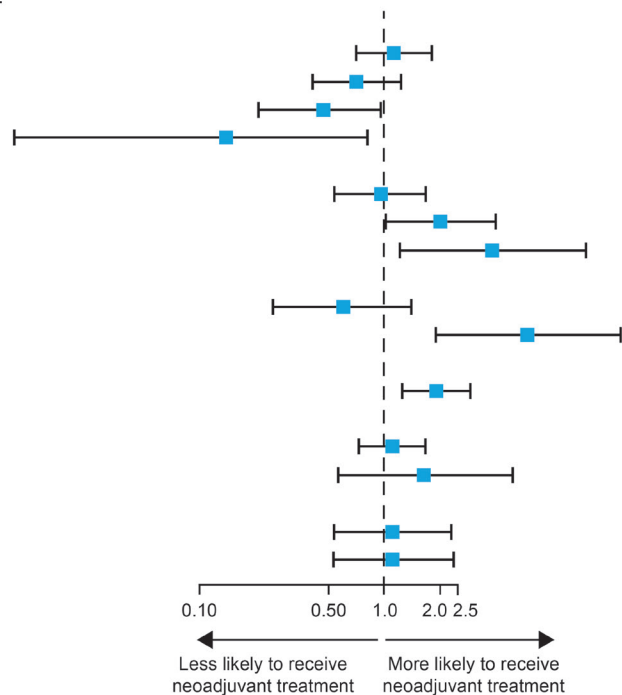
Covariate at diagnosis	Subgroup	OR	95% CI		P value
<b>Age, years</b>	<65 (reference)				
	65–69	0.72	0.36	1.36	0.324
	70–74	0.92	0.45	1.80	0.813
	75–79	0.57	0.23	1.26	0.191
<b>T staging</b>	T1 (reference)				
	T2	0.80	0.25	2.63	0.699
	T3	0.87	0.28	2.87	0.814
	T4	0.26	0.08	0.86	0.023
<b>N staging</b>	≤N2 (reference)				
	N3	0.23	0.10	0.48	<0.001
<b>Histology</b>	NSQ <sup>†</sup> (reference)				
	SQ	0.67	0.40	1.13	0.137
<b>ECOG PS</b>	0 (reference)				
	1	0.81	0.50	1.33	0.406
	≥2	0.23	0.04	0.82	0.053
<b>Smoking status</b>	Never smoked (reference)				
	Former smoker	0.56	0.23	1.43	0.203
	Active smoker	0.54	0.22	1.42	0.194



**Figure S1** Multivariable logistic regression describing factors associated with surgical resection in patients with stage (A) IIIA and (B) IIIB NSCLC. <sup>†</sup>, includes adenocarcinoma, large cell carcinoma, other NSCLC (specified or non-specified). NSCLC, non-small cell lung cancer; OR, odds ratio; CI, confidence interval; NSQ, non-squamous; SQ, squamous; ECOG PS, Eastern Cooperative Oncology Group performance status.

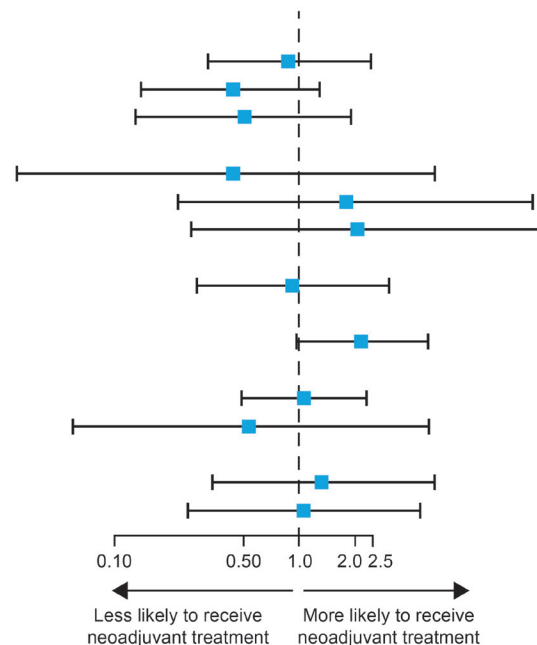
### A. Stage IIIA NSCLC

Covariate at diagnosis	Subgroup	OR	95% CI		P value
Age, years	<65 (reference)				
	65–69	1.13	0.70	1.82	0.614
	70–74	0.71	0.41	1.23	0.223
	75–79	0.47	0.21	0.96	0.045
	≥80	0.14	0.01	0.82	0.069
T staging	T1 (reference)				
	T2	0.96	0.54	1.68	0.874
	T3	2.02	1.02	4.04	0.045
	T4	3.86	1.21	12.48	0.023
N staging	N0 (reference)				
	N1	0.60	0.25	1.40	0.247
	≥N2	5.96	1.91	19.2	0.002
Histology	NSQ <sup>†</sup> (reference)				
	SQ	1.91	1.25	2.92	0.003
ECOG PS	0 (reference)				
	1	1.11	0.73	1.67	0.633
	≥2	1.65	0.56	4.95	0.363
Smoking status	Never smoked (reference)				
	Former smoker	1.11	0.54	2.32	0.786
	Active smoker	1.11	0.53	2.39	0.780



### B. Stage IIIB NSCLC

Covariate at diagnosis	Subgroup	OR	95% CI		P value
Age, years	<65 (reference)				
	65–69	0.88	0.32	2.45	0.807
	70–74	0.44	0.14	1.30	0.141
	75–79	0.51	0.13	1.91	0.321
	T staging	T1 (reference)			
	T2	0.44	0.03	5.39	0.507
	T3	1.80	0.22	18.38	0.592
	T4	2.07	0.26	21.21	0.504
N staging	≤N2 (reference)				
	N3	0.91	0.28	3.07	0.869
Histology	NSQ <sup>†</sup> (reference)				
	SQ	2.17	0.97	5.01	0.064
ECOG PS	0 (reference)				
	1	1.06	0.49	2.33	0.880
	≥2	0.54	0.06	5.08	0.566
Smoking status	Never smoked (reference)				
	Former smoker	1.32	0.34	5.42	0.688
	Active smoker	1.06	0.25	4.49	0.935



**Figure S2** Multivariable logistic regression describing factors associated with actual or planned neoadjuvant treatment in patients with stage (A) IIIA and (B) IIIB NSCLC. <sup>†</sup>, includes adenocarcinoma, large cell carcinoma, other NSCLC (specified or non-specified). NSCLC, non-small cell lung cancer; OR, odds ratio; CI, confidence interval; NSQ, non-squamous; SQ, squamous; ECOG PS, Eastern Cooperative Oncology Group performance status.

**Table S1** Definition of initial treatment groups<sup>†</sup>

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- Neoadjuvant SACT then surgery (SACT then surgery within 150 days but no radiotherapy prior to surgery, however, SACT can be administered again within 84 days after surgery; or SACT or radiotherapy and surgery within 90 days)
  - Surgery with adjuvant SACT (SACT within 84 days of surgery ± radiotherapy within 180 days of SACT start, or radiotherapy within 84 days of surgery and SACT within 180 days after radiotherapy start)
  - Surgery alone (no SACT or radiotherapy within 84 days of surgery)
  - Sequential chemoradiotherapy (curative; radiotherapy recorded as sequential or radiotherapy that starts within 42 days after SACT ends and no surgery within 90 days after radiotherapy ends)
  - SACT ± palliative radiotherapy (radiotherapy with palliative intent and SACT within 90 days after first radiotherapy treatment or SACT and radiotherapy with palliative intent within 150 days after first SACT treatment and no surgery within 180 days after SACT start; or SACT and no radiotherapy or surgery within 150 days after SACT starts)
  - Radiotherapy alone (no surgery or SACT within 90 days after radiotherapy start)
  - Concurrent chemoradiotherapy (curative; radiotherapy recorded as concomitant or radiotherapy that starts before SACT<sup>‡</sup> ends or radiotherapy that ends after SACT<sup>‡</sup> starts and no surgery within 90 days after radiotherapy ends)
- 

<sup>†</sup>, the following groups were excluded: surgery with adjuvant radiotherapy, surgery with neoadjuvant radiotherapy, curative SACT with radiotherapy, concurrent chemoradiotherapy with immuno-oncology agents, other SACT with radiotherapy, and no treatment; <sup>‡</sup>, no immuno-oncology agents. SACT, systemic anticancer therapy.





**Table S3** Summary of patients included in the study

Patient criteria	Excluded (n)	Total included (n)	Total included (%)
Step 1			
A   Patients with a diagnosis of incident Stage III (including Stage IIIA and IIIB) identified in the study data source by ICD-10 code	NA	3,751	–
Step 2			
B1   Only include patients ≥18 years old at date of diagnosis of NSCLC, with non-missing data on age or sex, and no SACT treatment during the 5 years prior to diagnosis date	0	3,751	100% of A
B2   Exclude patients diagnosed outside of the study period	828	2,923	77.9% of A
B3   Exclude patients with poor quality data	21	2,902	77.4% of A
Step 3			
C   Only include centres that frequently review data completed in the tumours thoracic registry	1,064	1,838	49.0% of A
Step 4			
D   Incident Stage III (including Stage IIIA and IIIB)	0	1,838	49.0% of A
Sub-cohorts identified			
E1   All adult NSCLC patients with Stage IIIA NSCLC at the time of their initial diagnosis	756	1,082	58.9% of D
E2   All adult NSCLC patients with Stage IIIB NSCLC at the time of their initial diagnosis	1,082	756	41.1% of D

NA, not applicable; NSCLC, non-small cell lung cancer; SACT, systemic anticancer therapy.