

**Supplementary Table S1.** Sensitivity analysis for participants not receiving chemotherapy (N=52,083)

	No. deaths/person- years	Mortality Rate (per 1,000 person-years) (95% CI)	Age-adjusted HR (95% CI)	aHR (95% CI) †	aHR (95% CI) §
<b>CCI</b>					
<b>0</b>	6,335/99,920.61	63.4 (61.9-64.9)	1 [Reference]	1 [Reference]	1 [Reference]
<b>1</b>	5,404/61,968.89	87.2 (85.0-89.5)	1.37 (1.32-1.42)	1.29 (1.25-1.34)	1.26 (1.22-1.31)
<b>2+</b>	3,430/29,905.93	114.7 (111.1-118.4)	1.78 (1.71-1.86)	1.62 (1.55-1.69)	1.56 (1.49-1.62)
			p-trend < 0.01	p-trend < 0.01	p-trend < 0.01

Abbreviations: **aHR**: Adjusted hazard ratio; **CCI**: Charlson comorbidity index; **CI**: Confidence interval

† Adjusted for age, sex, race/ethnicity, education, income, insurance, and facility type (academic versus nonacademic)

§ Adjusted for all covariates included in first model, as well as stage at diagnosis, days from diagnosis to surgery and histological type

**Supplementary Table S2.** Sensitivity analysis incorporating different sets of covariates and indicator of exclusion due to missing data

	<b>Model 1 (N=66,508)</b> <b>aHR (95% CI)</b>	<b>Model 2 (N=75,701)</b> <b>aHR (95% CI)</b>	<b>Model 3 (N=63,061)</b> <b>aHR (95% CI)</b>
<b>CCI</b>			
0	1 [Reference]	1 [Reference]	1 [Reference]
1	1.26 (1.22-1.30)	1.26 (1.22-1.30)	1.23 (1.19-1.27)
2+	1.56 (1.51-1.62)	1.57 (1.52-1.63)	1.55 (1.45-1.56)
	p-trend < 0.01	p-trend < 0.01	p-trend < 0.01
<b>Adjusted variables</b>	Age, sex, race/ethnicity, income, education, and indicator of exclusion	Age, sex, race/ethnicity, insurance, facility type, and indicator of exclusion	Age, sex, race/ethnicity, histological type, tumor stage, receipt of chemotherapy, days from diagnosis to surgery, and indicator of exclusion
<b>No. of additional cases in model</b>	4,748	13,941	1,301
<b>Ratio to study population‡</b>	1.08	1.23	1.02

‡The ratio is calculated as (No. patients included for sensitivity analysis/No. study population in main model [N=61,760])

**Supplementary Table S3.** Sensitivity analysis for 90-day mortality by CCI

CCI	No. deaths within 90 days after surgery	Proportion (%) of deaths and 95% CI
0 (N=31,623)	573	1.8 (1.7-2.0)
1 (N=19,640)	469	2.4 (2.2-2.6)
2+ (N=10,497)	337	3.2 (2.9-3.6)

**Supplementary Table S4.** Sensitivity analysis for participants who received sublobar resection (N=18,007)

CCI	aHR (95% CI)			p-interaction
	Wedge resection (N=13,951)	Segmental resection (N=3,611)	Other* (N=445)	
0	1 [Reference]	1 [Reference]	1 [Reference]	< 0.01
1	1.21 (1.13-1.29)	1.46 (1.27-1.68)	1.47 (1.05-2.05)	
2+	1.51 (1.41-1.63)	1.56 (1.33-1.84)	1.15 (0.79-1.69)	

\*Includes unspecified excision, laser excision, and bronchial sleeve resection (aggregated due to low counts)

Model adjusted for age, sex, race/ethnicity, education, income, insurance, facility type (academic versus nonacademic), stage at diagnosis, histological type, days from diagnosis to surgery, and receipt of adjuvant chemotherapy

**Supplementary Figure S1.** Kaplan-Meier survival curve by CCI, including patients with missing values for relevant covariates.

