

Supplemental Table 5. Full Cox and Logistic Model Results of Safety Events Adjusting for Patient Characteristics, Matched Cohort

Independent Variables	Rate of post-operative complication		Risk of a short-term life-threatening event	
	HR (LCL, UCL)	p value	OR (LCL, UCL)	p value
ISD (vs MILD)	1.04 (0.83, 1.30)	0.747	0.83 (0.52, 1.33)	0.433
Age group: 50-64 (reference)				
65-69	0.80 (0.51, 1.25)	0.325	1.16 (0.44, 3.02)	0.766
70-74	0.77 (0.49, 1.20)	0.246	0.75 (0.28, 2.05)	0.581
75-79	0.80 (0.51, 1.25)	0.326	0.72 (0.26, 1.97)	0.520
80-84	0.74 (0.46, 1.20)	0.229	1.02 (0.37, 2.81)	0.973
>=85	1.13 (0.68, 1.88)	0.639	1.40 (0.48, 4.10)	0.544
Male (vs Female)	1.04 (0.82, 1.32)	0.718	1.60 (0.98, 2.62)	0.061
Race: Caucasian (reference)				
Black	1.24 (0.75, 2.07)	0.396	1.29 (0.45, 3.72)	0.632
Region: Midwest (reference)	1.00 (0.00, 0.00)		1.00 (0.00, 0.00)	
Northeast	1.25 (0.85, 1.86)	0.262	0.49 (0.17, 1.42)	0.188
South	1.01 (0.77, 1.33)	0.936	0.91 (0.54, 1.53)	0.716
West	1.13 (0.78, 1.65)	0.510	0.75 (0.33, 1.68)	0.486
Index year: 2017 (reference)				
2018	0.78 (0.50, 1.22)	0.280	0.28 (0.10, 0.83)	0.021
2019	0.92 (0.60, 1.39)	0.680	0.39 (0.17, 0.90)	0.028
2020	0.61 (0.39, 0.96)	0.033	0.51 (0.23, 1.14)	0.100
2021	0.32 (0.15, 0.70)	0.004	0.27 (0.10, 0.74)	0.011
Charlson Comorbidity Index	1.10 (1.01, 1.19)	0.032	1.18 (1.02, 1.37)	0.029
Asthma (vs no)	0.83 (0.55, 1.25)	0.370	1.05 (0.49, 2.28)	0.897
Back syndrome	1.08 (0.65, 1.79)	0.776	1.72 (0.72, 4.09)	0.219
COPD	1.09 (0.78, 1.51)	0.617	1.25 (0.67, 2.34)	0.480
Diabetes	1.25 (0.94, 1.66)	0.119	1.24 (0.70, 2.18)	0.464
Diabetic neuropathy	1.19 (0.78, 1.83)	0.419	1.05 (0.45, 2.44)	0.910
Intervertebral disc disorders	0.98 (0.76, 1.26)	0.881	1.07 (0.64, 1.79)	0.792
Heart failure	0.82 (0.54, 1.24)	0.335	1.22 (0.60, 2.51)	0.584
Hypertension	0.84 (0.65, 1.09)	0.182	1.08 (0.62, 1.86)	0.787

Obesity	1.31 (0.96, 1.78)	0.093	0.73 (0.37, 1.45)	0.369
Osteoarthritis	0.95 (0.74, 1.22)	0.711	0.94 (0.56, 1.57)	0.813
Osteoporosis	1.70 (1.23, 2.34)	0.001	1.50 (0.74, 3.02)	0.260
Closed lumbar, vertebral, or hip fracture	5.03 (3.17, 7.98)	<0.001	1.00 (1.00, 1.00)	1.000
Spondylolisthesis in other regions	1.03 (0.54, 1.96)	0.921	0.77 (0.18, 3.23)	0.719
Lumbar spondylolisthesis	0.98 (0.68, 1.41)	0.920	1.52 (0.78, 2.98)	0.218
Vascular claudication	1.41 (0.66, 3.02)	0.372	1.70 (0.51, 5.71)	0.388

COPD, chronic obstructive pulmonary disease; HR, hazard ratio; ISD, interspinous spacer; LCL, lower confidence limit; MILD, minimally invasive lumbar decompression; OR, odds ratio; UCL, upper confidence limit