

**Supplementary Table 8. Subgroup analyses of 30-day postoperative mortality after standard surgery**

	Adjusted odds ratio (95% confidence interval)*				
	No. of patients	COVID-19 infection 0–4 weeks prior to surgery	COVID-19 infection 5–8 weeks prior to surgery	COVID-19 infection > 8 weeks prior to surgery	P value for interaction
Age, yr					0.856
0–49	250,681	12.29 (2.40, 62.84)	2.69 (0.16, 44.16)	2.37 (0.47, 11.83)	
50–69	334,269	6.39 (1.81, 22.60)	5.14 (1.75, 15.04)	2.01 (0.86, 4.68)	
≥ 70	165,225	3.14 (0.86, 11.42)	3.30 (1.12, 9.78)	1.36 (0.53, 3.51)	
Sex					0.565
Female	411,189	5.21 (1.45, 18.73)	4.68 (1.59, 13.79)	2.35 (1.13, 4.92)	
Male	338,986	4.31 (1.45, 12.80)	2.96 (1.01, 8.68)	1.01 (0.35, 2.92)	
Updated Charlson comorbidity index score					0.848
0–3	716,926	5.13 (2.18, 12.10)	3.38 (1.44, 7.94)	1.74 (0.91, 3.30)	
4–5	23,559	5.13 (2.18, 12.10)	6.67 (1.13, 39.38)	2.88 (0.52, 15.88)	
≥ 6	9,690	5.13 (2.18, 12.10)	5.79 (0.21, 156.11)	1.74 (0.91, 3.30)	
Vaccination					0.204
Not or not fully vaccinated	536,868	10.03 (4.16, 24.20)	3.10 (1.06, 9.04)	2.18 (1.05, 4.51)	
Fully vaccinated	210,638	0.66 (0.04, 10.96)	4.39 (1.48, 13.06)	1.08 (0.37, 3.14)	
Relative work unit					0.515
First quartile (lowest)	171,815	12.43 (2.24, 69.01)	5.80 (0.35, 96.89)	1.13 (0.07, 18.29)	
Second quartile	202,928	13.26 (3.68, 47.78)	12.22 (3.39, 44.04)	3.19 (0.91, 11.14)	
Third quartile	187,780	5.44 (1.05, 28.23)	5.25 (1.47, 18.68)	1.76 (0.59, 5.20)	
Fourth quartile (highest)	187,652	2.04 (0.39, 10.63)	2.11 (0.59, 7.53)	1.59 (0.68, 3.72)	
Income level at the index procedure					0.822
First quartile (lowest)	210,745	2.79 (0.53, 14.67)	5.30 (1.77, 15.89)	0.74 (0.15, 3.71)	

Second quartile	179,168	5.31 (0.99, 28.63)	4.10 (0.79, 21.30)	2.38 (0.81, 6.98)	
Third quartile	200,847	13.08 (4.36, 39.23)	3.33 (0.64, 13.24)	2.27 (0.77, 6.67)	
Fourth quartile (highest)	159,415	2.13 (0.12, 38.84)	3.27 (0.62, 17.24)	2.15 (0.73, 6.33)	
Residence level at the index procedure					0.480
Capital city	135,177	6.96 (2.29, 21.18)	3.74 (1.04, 13.45)	1.59 (0.55, 4.64)	
Metropolitan city	186,650	7.06 (1.32, 37.75)	6.76 (2.26, 20.28)	0.28 (0.02, 4.52)	
Other areas	428,348	2.59 (0.50, 13.37)	2.00 (0.39, 10.27)	2.83 (1.35, 5.94)	

\*Referenced to the patients without preoperative COVID-19 infection.