

Supplemental Table 7. Unadjusted analyses of associations between demographic and clinical characteristics with COVID-19 in-hospital death

	No COVID-19 In-Hospital Death N = 5,798,634	COVID-19 In-Hospital Death N = 7,593	Unadjusted analysis	
Variable	N (%) or Mean (SD)	N (%) or Mean (SD)	Hazard Ratio (95% CI)	p-value
Non-infectious uveitis	29,794 (0.5)	75 (1.0)	1.88 (1.50, 2.37)	<0.001
Age (years)	50.24 (23.5)	77.63 (9.6)	1.102 (1.099, 1.104)	<0.001
Gender				
Female	2,983,317 (51.5)	3,461 (45.6)	Reference	
Male	2,812,274 (48.5)	4,132 (54.4)	1.28 (1.22, 1.34)	<0.001
Unknown	3,043 (0.1)	0 (0.0)	NA	NA
Race/ethnicity				
White	3,733,402 (64.4)	4,294 (56.6)	Reference	
Asian	299,840 (5.2)	221 (2.9)	0.67 (0.58, 0.76)	<0.001
Black	585,751 (10.1)	1,546 (20.4)	2.31 (2.18, 2.45)	<0.001
Hispanic	675,019 (11.6)	1,227 (16.2)	1.63 (1.53, 1.73)	<0.001
Other/Unknown	504,622 (8.7)	305 (4.0)	0.51 (0.45, 0.57)	<0.001
Region				
South	2,500,012 (43.1)	3,494 (46.0)	Reference	
Midwest	1,533,347 (26.4)	1,885 (24.8)	0.87 (0.83, 0.92)	<0.001
Northeast	638,640 (11.0)	1,736 (22.9)	1.94 (1.83, 2.1)	<0.001
West	<947,686 (<16.4)	>467 (>6.1)	0.37 (0.33, 0.41)	<0.001
Other/Unknown	>178,949 (>3.1)	<11 (<0.2)	0.04 (0.02, 0.07)	<0.001
Homeownership				
Probable homeowner	3,976,466 (68.6)	4,895 (64.5)	Reference	
Probable renter	442,367 (7.6)	501 (6.6)	0.96 (0.87, 1.05)	0.33
Unknown	1,379,801 (23.8)	2,197 (28.9)	1.33 (1.27, 1.40)	<0.001
Smoking status				
Never smoker	849,987 (14.7)	1,076 (14.2)	Reference	
Current/former smoker	935,817 (16.1)	2,660 (35.0)	2.28 (2.12, 2.45)	<0.001
Unknown	4,012,830 (69.2)	3,857 (50.8)	0.79 (0.74, 0.84)	<0.001
Asthma	326,945 (5.6)	675 (8.9)	1.62 (1.50, 1.76)	<0.001
Autoimmune disease	424,393 (7.3)	1,361 (17.9)	2.72 (2.57, 2.88)	<0.001
Cancer	313,162 (5.4)	1,155 (15.2)	3.12 (2.93, 3.32)	<0.001
Cardiovascular disease	607,189 (10.5)	3,816 (50.3)	8.55 (8.18, 8.95)	<0.001
Cerebrovascular	273,546 (4.7)	1,660 (21.9)	5.63 (5.34, 5.95)	<0.001
Chronic kidney disease	442,226 (7.6)	3,185 (42.0)	8.64 (8.26, 9.05)	<0.001
Chronic lung disease	439,730 (7.6)	2,342 (30.8)	5.43 (5.17, 5.70)	<0.001
Diabetes	846,467 (14.6)	4,093 (53.9)	6.70 (6.40, 7.01)	<0.001
Hemoglobin disorder	8,577 (0.2)	20 (0.3)	1.76 (1.14, 2.73)	0.01
HIV/AIDS	11,993 (0.2)	30 (0.4)	1.94 (1.35, 2.77)	<0.001
Hypertension	2,010,282 (34.7)	6,639 (87.4)	12.66 (11.83, 13.55)	<0.001
Liver disease	11,059 (0.2)	73 (1.0)	5.50 (4.37, 6.93)	<0.001

Neurologic disease	229,803 (4.0)	2,370 (31.2)	11.52 (10.98, 12.10)	<0.001
Obesity	627,258 (10.8)	1,622 (21.4)	2.21 (2.10, 2.33)	<0.001
Solid organ transplant	16,033 (0.3)	75 (1.0)	3.57 (2.85, 4.48)	<0.001
Pregnancy	62,293 (1.1)	16 (0.2)	0.19 (0.12, 0.32)	<0.001
Systemic corticosteroids	647,511 (11.2)	1,983 (26.1)	2.65 (2.52, 2.79)	<0.001
DMARDs	52,571 (0.9)	179 (2.4)	2.52 (2.17, 2.92)	<0.001
TNF-alpha inhibitors	16,684 (0.3)	16 (0.2)	0.71 (0.44, 1.17)	0.18
IL-6 inhibitors	>749 (>0.01)	<11 (<0.15)	1.91 (0.48, 7.65)	0.36
Other biologics	13,744 (0.2)	13 (0.2)	0.70 (0.41, 1.20)	0.20
Other immunosuppressive drugs	20,753 (0.4)	47 (0.6)	1.66 (1.25, 2.21)	<0.001

P-values calculated from Cox proportional hazards models. Reference groups for comorbidities and medications are the group of patients without the given disease or without a prescription for the given medication. SD=standard deviation; CI=confidence interval; HIV=human immunodeficiency virus; AIDS=acquired immunodeficiency syndrome; DMARDs=disease-modifying anti-rheumatic drugs; TNF-alpha=tumor necrosis factor alpha; IL-6=interleukin 6.