

Supplemental Table 1 – International Classification of Diseases (ICD) Codes Used to Identify Inflammatory Bowel Disease

	ICD-9	ICD-10
Ulcerative Colitis	556.0, 556.1, 556.2, 556.3, 556.4, 556.5, 556.6, 556.8, 556.9	K51.00, K51.011, K51.012, K51.013, K51.014, K51.018, K51.019, K51.20, K51.211, K51.212, K51.213, K51.214, K51.218, K51.219, K51.30, K51.311, K51.312, K51.313, K51.314, K51.318, K51.319, K51.40, K51.411, K51.412, K51.413, K51.414, K51.418, K51.419, K51.50, K51.511, K51.512, K51.513, K51.514, K51.518, K51.519, K51.80, K51.811, K51.812, K51.813, K51.814, K51.818, K51.819, K51.90, K51.911, K51.912, K51.913, K51.914, K51.918, K51.919
Crohn's Disease	555.0, 555.1, 555.2, 555.9	K50.00, K50.011, K50.012, K50.013, K50.014, K50.018, K50.019, K50.10, K50.111, K50.112, K50.113, K50.114, K50.118, K50.119, K50.80, K50.811, K50.812, K50.813, K50.814, K50.818, K50.819, K50.90, K50.911, K50.912, K50.913, K50.914, K50.918, K50.919

Supplemental Table 2 – Sensitivity Analysis of Mixed-Effects Cox Regression Model for SARS-CoV2 Infection*† with Relaxed Exclusion Criteria

Variable	Hazard Ratio	95% Confidence Interval	p-value
Age (per year)	0.99	(0.99 - 1.00)	0.001
Race			
White	(ref)		
Black	1.51	(1.24 - 1.85)	<0.001
Hispanic	1.23	(0.86 - 1.75)	0.26
Other	1.60	(1.15 - 2.21)	0.005
Diabetes Mellitus	1.44	(1.20 - 1.72)	<0.001
Peripheral Vascular Disease	1.78	(1.32 - 2.39)	<0.001
Obesity	1.35	(1.10 - 1.65)	0.004
Corticosteroid Use	1.60	(1.23 - 2.08)	<0.001
IBD Med Category			
5-ASA	(ref)		
Thiopurine	1.03	(0.76 - 1.40)	0.84
Anti-TNF	1.14	(0.89 - 1.45)	0.31
Anti-TNF + TP	1.24	(0.85 - 1.79)	0.26
Anti-TNF + MTX	0.93	(0.49 - 1.76)	0.82
Vedolizumab	1.70	(1.16 - 2.48)	0.006
No IBD Meds	0.94	(0.78 - 1.13)	0.52

* United States geographic region is treated as a random effect

† The following variables were not retained in final multivariable models on the basis of $p > 0.05$ or non-minimization of Bayesian Information Criterion in associated models: sex, inflammatory bowel disease diagnosis, hypertension, heart failure, arrhythmia, chronic obstructive pulmonary disease, renal failure

Supplemental Table 3 – Sensitivity Analysis for Development of SARS-CoV2 Infection using Fine and Gray Competing Risks Regression*

Variable	Subhazard Ratio	95% Confidence Interval	p-value
Age (per year)	0.99	(0.99 - 1.00)	0.001
Race			
White	(ref)		
Black	1.47	(1.20 - 1.81)	<0.001
Hispanic	1.21	(0.85 - 1.71)	0.29
Other	1.50	(1.07 - 2.10)	0.02
Diabetes Mellitus	1.43	(1.19 - 1.73)	<0.001
Peripheral Vascular Disease	1.70	(1.26 - 2.31)	0.001
Obesity	1.30	(1.05 - 1.61)	0.02
Corticosteroid Use	1.56	(1.19 - 2.03)	0.001
IBD Med Category			
5-ASA alone	(ref)		
Thiopurine	1.05	(0.77 - 1.43)	0.75
Anti-TNF	1.14	(0.89 - 1.46)	0.31
Anti-TNF + TP	1.26	(0.87 - 1.83)	0.22
Anti-TNF + MTX	0.90	(0.48 - 1.72)	0.76
Vedolizumab	1.69	(1.16 - 2.48)	0.007
No IBD Meds	1.01	(0.83 - 1.23)	0.92

* *Death from any non-COVID-19-related cause was treated as a competing event*