

Supplemental information

Seasonal human coronavirus antibodies

are boosted upon SARS-CoV-2 infection

but not associated with protection

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Table S1: Comparison between antibody titers and COVID-19 phenotypes, related to Figure 2.

Phenotype Name	Antibody Titers	Beta	SE	P	Cases	Controls
SARS-CoV-2 Susceptibility	N titer	9E-05	1E-04	0.47	251	251
SARS-CoV-2 Susceptibility	Spike-FL Titer	-1E-04	3E-04	0.65	251	251
SARS-CoV-2 Susceptibility	Spike-RBD Titer	5E-04	9E-04	0.53	251	251
SARS-CoV-2 Susceptibility	OC43 Spike Titer	1E-06	2E-05	0.93	251	251
COVID-19 Hospitalization	N Titer	1E-04	1E-04	0.40	80	171
COVID-19 Hospitalization	Spike-FL Titer	-5E-04	1E-03	0.61	80	171
COVID-19 Hospitalization	Spike-RBD Titer	-2E-03	1E-01	0.99	80	171
COVID-19 Hospitalization	OC43 Spike Titer	1E-05	3E-05	0.62	80	171
COVID-19 Severe Hospitalization	N Titer	-5E-04	1E-03	0.70	24	171
COVID-19 Severe Hospitalization	Spike-FL Titer	-1E-04	8E-04	0.88	24	171
COVID-19 Severe Hospitalization	Spike-RBD Titer	-2E-03	2E-01	0.99	24	171
COVID-19 Severe Hospitalization	OC43 Spike Titer	2E-05	5E-05	0.74	24	171

Table S2: Phenotype definitions related to Table S1, related to Figure 2.

Phenotype Name	Case Definition	Control Definition	Case	Controls
SARS-CoV-2 Susceptibility	RT-PCR confirmed <i>positive</i> test for SARS-CoV2 infection	RT-PCR confirmed <i>negative</i> test for SARS-CoV2 infection	251	251
COVID-19 Hospitalization	RT-PCR confirmed positive test for SARS-CoV2 infection and <i>hospitalized</i> due to COVID-19	RT-PCR confirmed positive test for SARS-CoV2 infection and <i>not hospitalized</i> due to COVID-19	80	171
COVID-19 Severe Hospitalization	RT-PCR confirmed positive test for SARS-CoV2 infection and <i>required respiratory support or had ICU stay</i> due to COVID-19	RT-PCR confirmed positive test for SARS-CoV2 infection and <i>not hospitalized</i> due to COVID-19	24	171