

Supplemental Information

COVID-19-neutralizing antibodies

predict disease severity and survival

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Table S1

Severity Cohort	non-hospitalized	hospitalized	intubated	deceased	immunosuppressed
Total	n = 18	n = 45	n = 27	n = 10	n = 13
Demographics					
Age (median, range)	26.5 (0 - 68)	66 (0 - 91)	63 (35 - 83)	60 (39 - 77)	60 (29 - 80)
Sex (% male)	50% (9/18)	49% (22/45)	78% (21/27)	70% (7/10)	62% (8/13)
Language, primary (% non-English)	39% (7/18)	36% (16/45)	59% (16/27)	20% (2/10)	8% (1/13)
Clinical Course					
PCR-positive days [‡] (median, range)	11 (0 - 44)	17 (2 - 55)	34.5 (13 - 68)	19.5 (7 - 35)	36 (10 - 55)
Hospitalized	0% (0/18)	100% (45/45)	100% (27/27)	100% (10/10)	85% (11/13)
Days hospitalized (median, range)	-	5 (1 - 41)	43 (15 - 118)	31.5 (1 - 66)	10 (0 - 50)
Intubated	0% (0/18)	0% (0/45)	100% (27/27)	90% (9/10)	38% (5/13)
Days intubated (median, range)	-	-	26 (6 - 65)	22.5 (0 - 57)	0 (0 - 41)
ECMO	0% (0/18)	0% (0/45)	7% (2/27)	20% (2/10)	0% (0/13)
Deceased	0% (0/18)	0% (0/45)	0% (0/27)	100% (10/10)	0% (0/13)
Pre-existing medical conditions					
No significant conditions	94% (17/18)	9% (4/45)	4% (1/27)	20% (2/10)	0% (0/13)
Lung disease	0% (0/18)	31% (14/45)	11% (3/27)	10% (1/10)	0% (0/13)
Heart disease	0% (0/18)	36% (16/45)	11% (3/27)	20% (2/10)	15% (2/13)
Vascular disease	0% (0/18)	13% (6/45)	0% (0/27)	10% (1/10)	0% (0/13)
Hypertension	6% (1/18)	56% (25/45)	70% (19/27)	40% (4/10)	31% (4/13)
Diabetes mellitus	0% (0/18)	40% (18/45)	59% (16/27)	30% (3/10)	15% (2/13)
Obesity	0% (0/18)	22% (10/45)	37% (10/27)	0% (0/10)	8% (1/13)
Kidney disease	0% (0/18)	22% (10/45)	11% (3/27)	10% (1/10)	38% (5/13)
Autoimmune disease	6% (1/18)	7% (3/45)	0% (0/27)	10% (1/10)	46% (6/13)
Hematologic malignancy	0% (0/18)	0% (0/45)	0% (0/27)	0% (0/10)	23% (3/13)
Non-hematology malignancy	0% (0/18)	11% (5/45)	7% (2/27)	20% (2/10)	0% (0/13)
Solid organ transplant	0% (0/18)	0% (0/45)	0% (0/27)	10% (1/10)	46% (6/13)
HSC transplant	0% (0/18)	0% (0/45)	0% (0/27)	0% (0/10)	8% (1/13)
Immunosuppressed	0% (0/18)	0% (0/45)	0% (0/27)	0% (0/10)	100% (13/13)
Treatments received					
Hydroxychloroquine	0% (0/18)	9% (4/45)	11% (3/27)	10% (1/10)	8% (1/13)
Azithromycin	0% (0/18)	7% (3/45)	15% (4/27)	10% (1/10)	23% (3/13)
Remdesivir	0% (0/18)	7% (3/45)	15% (4/27)	10% (1/10)	38% (5/13)
Tocilizumab [†]	0% (0/18)	22% (10/45)	19% (5/27)	0% (0/10)	31% (4/13)
Anakinra	0% (0/18)	0% (0/45)	4% (1/27)	0% (0/10)	0% (0/13)
Corticosteroids	0% (0/18)	7% (3/45)	7% (2/27)	10% (1/10)	15% (2/13) ^{‡‡}

* PCR-positive days is defined as the numbers of days from the first documents PCR-positive result to the last document PCR-positive result that was followed by at least one PCR-negative result

[†] The majority of patients receiving tocilizumab were enrolled in a blinded randomized control trial with 2:1 randomization of tocilizumab to placebo, except for two patient who received it off-label

^{‡‡} In the immunosuppressed cohort, corticosteroid treatment refers to patients that newly started corticosteroids or had an increase in their baseline dose of corticosteroids (if applicable)

Table S1. Clinical data from COVID-19 patients, Related to Figure 1. Clinical data is shown for each pre-defined severity cohort.