

SUPPLEMENTARY TABLES

Supplementary Table 1. Breakdown of patients according to World Health Organisation (WHO) regions (N = 348)	
WHO Regions	n (%)
Region of the Americas	166 (47.7%)
<u>North</u>	
Canada	4
USA	99
<u>South</u>	
Argentina	20
Brazil	16
Chile	3
Dominican Republic	1
Mexico	18
Panama	1
Paraguay	1
Peru	3
South-East Asia	1 (0.3%)
India	1
European	162 (46.6%)
Austria	1
Belgium	2
Croatia	5
Czech Republic	14
England	18
France	34
Germany	21
Greece	5
Israel	2
Italy	19

Latvia	1
Lithuania	1
Norway	1
Poland	1
Republic of Ireland	2
Romania	3
Slovak Republic	5
Spain	4
Sweden	18
Switzerland	1
Turkey	3
Ukraine	1
Eastern Mediterranean	7 (2.0%)
Iran	1
Kuwait	3
Pakistan	1
Qatar	2
Western Pacific	11 (3.2%)
Japan	6
Malaysia	3
Philippines	2
Africa	1 (0.3%)
Mozambique	1

Supplementary Table 2. Multivariable ordinal logistic regression analysis of factors associated with the 3-point ordinal COVID-19 severity outcome scale (no hospitalisation, hospitalisation, death), with comorbidities listed individually instead of comorbidity count (N = 348, secondary analysis)		
	OR	p-value
Age (per decade)	1.65 (1.36-2.00)	<0.001
Male sex	1.65 (1.01-2.71)	0.044
Region		
Europe	REF	n/a
North America	0.91 (0.50-1.65)	0.757
Other	4.33 (2.22-8.43)	<0.001
Pandemic calendar period		
On/before 15 June 2020	REF	n/a
16 June-30 September 2020	0.57 (0.25-1.26)	0.162
On/after 1 October 2020	0.59 (0.35-0.97)	0.039
Comorbidities		
Hypertension or cardiovascular disease	1.24 (0.72-2.14)	0.428
Interstitial lung disease	1.42 (0.81-2.49)	0.220
Diabetes	1.90 (0.95-3.79)	0.070
Chronic renal disease	1.23 (0.39-3.84)	0.721
Cancer	1.03 (0.41-2.57)	0.947
Obesity	0.95 (0.52-1.72)	0.854
Disease activity		
Remission	REF	n/a
Low/Moderate disease activity	1.28 (0.59-2.39)	0.513
High disease activity	3.94 (1.25-12.36)	0.020

Glucocorticoid (prednisolone-equivalent dose)		
No glucocorticoids	REF	n/a
>0 to 7.5mg/day	1.16 (0.61-2.69)	0.670
>7.5mg/day	2.89 (1.49-5.61)	0.002
IVIg	0.39 (0.25-5.66)	0.076
DMARD/immunosuppressant medication category		
csDMARD only (HCQ/MTX/SSZ/LEF monotherapy or combination therapy)	REF	n/a
No DMARD/immunosuppressant	1.81 (0.88-3.71)	0.105
AZA monotherapy	1.70 (0.68-4.26)	0.255
MMF monotherapy	1.31 (0.56-3.10)	0.532
AZA/MMF combination therapy (except combination with RTX or b/tsDMARDs)	0.75 (0.26-2.11)	0.582
CSA/CYC/TAC monotherapy or combination therapy (except RTX/b/tsDMARDs)	1.44 (0.48-4.34)	0.519
b/tsDMARD monotherapy or combination therapy (except RTX)	1.48 (0.43-5.04)	0.529
RTX (monotherapy or combination therapy with any other drug)	2.66 (1.25-5.66)	0.011
95% CI, 95% confidence interval; AZA, azathioprine; bDMARD, biologic DMARD; CSA, ciclosporin; csDMARD, conventional synthetic DMARD; CYC, cyclophosphamide; DMARD, disease-modifying anti-rheumatic drug; HCQ, hydroxychloroquine; IVIg, intravenous immunoglobulin; LEF, leflunomide; MMF, mycophenolate mofetil; MTX, methotrexate; OR, odds ratio; RTX, rituximab; SSZ, sulfasalazine; TAC, tacrolimus; tsDMARD, targeted synthetic DMARD; IL, interleukin; TNF, tumour necrosis factor; JAKi, Janus kinase inhibitors; IVIg, intravenous immunoglobulin.		

Supplementary Table 3. Multivariable ordinal logistic regression analysis of factors associated with the 4-point ordinal COVID-19 severity outcome scale (no hospitalisation, hospitalisation with no oxygen, hospitalisation with oxygen/ventilation, death), with comorbidity count instead of comorbidities listed individually (N = 312, sensitivity analysis)		
	OR	p-value
Age (per decade)	1.67 (1.37-2.04)	<0.001
Male gender	1.78 (1.05-3.00)	0.032
Region		
Europe	REF	n/a
North America	0.94 (0.49-1.82)	0.858
Other	4.04 (2.06-7.90)	<0.001
Pandemic calendar period		
On/before 15 June 2020	REF	n/a
16 June-30 September 2020	0.50 (0.22-1.11)	0.087
On/after 1 October 2020	0.51 (0.29-0.87)	0.014
Comorbidity count		
None	REF	n/a
One	1.21 (0.60-2.44)	0.600
Two or more	2.54 (1.31-4.95)	0.006
Disease activity		
Remission	REF	n/a
Low/moderate disease activity	1.25 (0.62-2.52)	0.522
High disease activity	4.82 (1.44-16.17)	0.011
Glucocorticoid (prednisolone-equivalent dose)		
No glucocorticoids	REF	n/a

>0 to 7.5mg/day	1.29 (0.66-2.53)	0.451
>7.5mg/day	2.60 (1.18-5.72)	0.018
IVIg	0.41 (0.13-1.28)	0.123
DMARD/immunosuppressant medication category		
csDMARD only (HCQ/MTX/SSZ/LEF monotherapy or combination therapy)	REF	n/a
No DMARD/immunosuppressant	1.42 (0.65-3.09)	0.379
AZA monotherapy	1.58 (0.61-4.09)	0.348
MMF monotherapy	1.38 (0.59-3.22)	0.453
AZA/MMF combination therapy (except combination with RTX or b/tsDMARDs)	0.63 (0.22-1.84)	0.398
CSA/CYC/TAC monotherapy or combination therapy (except RTX/b/tsDMARDs)	1.07 (0.37-3.09)	0.907
b/tsDMARD monotherapy or combination therapy (except RTX)	1.53 (0.43-5.40)	0.511
RTX (monotherapy or combination therapy with any other drug)	2.33 (1.03-5.30)	0.043
95% CI, 95% confidence interval; AZA, azathioprine; bDMARD, biologic DMARD; CSA, ciclosporin; csDMARD, conventional synthetic DMARD; CYC, cyclophosphamide; DMARD, disease-modifying anti-rheumatic drug; HCQ, hydroxychloroquine; IVIg, intravenous immunoglobulin; LEF, leflunomide; MMF, mycophenolate mofetil; MTX, methotrexate; OR, odds ratio; RTX, rituximab; SSZ, sulfasalazine; TAC, tacrolimus; tsDMARD, targeted synthetic DMARD; IL, interleukin; TNF, tumour necrosis factor; JAKi, Janus kinase inhibitors; IVIg, intravenous immunoglobulin.		

Supplementary Table 4. Multivariable ordinal logistic regression analysis of factors associated with the 4-point ordinal COVID-19 severity outcome scale (no hospitalisation, hospitalisation with no oxygen, hospitalisation with oxygen/ventilation, death), with comorbidities listed individually instead of comorbidity count (N = 312, sensitivity analysis)		
	OR	p-value
Age (per decade)	1.70 (1.39-2.08)	<0.001
Male gender	1.83 (1.07-3.13)	0.027
Region		
Europe	REF	n/a
North America	0.91 (0.46-1.79)	0.791
Other	3.83 (1.94-7.57)	<0.001
Pandemic calendar period		
On/Before 15 June 2020	REF	n/a
16 June-30 September 2020	0.56 (0.24-1.27)	0.164
On/after 1 October 2020	0.52 (0.30-0.90)	0.021
Co-morbidities		
Hypertension or cardiovascular disease	1.48 (0.85-2.60)	0.167
Interstitial lung disease	1.29 (0.72-2.31)	0.393
Diabetes	2.08 (1.00-4.33)	0.051
Chronic renal disease	1.80 (0.50-6.46)	0.366
Cancer	0.78 (0.28-2.16)	0.635
Obesity	0.91 (0.48-1.74)	0.786
Disease activity		
Remission	REF	n/a
Low/moderate disease activity	1.22 (0.60-2.50)	0.578

High disease activity	5.38 (1.44-20.03)	0.013
Glucocorticoid (prednisolone-equivalent dose)		
No glucocorticoids	REF	n/a
>0 to 7.5mg/day	1.42 (0.69-2.94)	0.340
>7.5mg/day	3.09 (1.50-6.34)	0.002
IVIg	0.38 (0.12-1.22)	0.103
DMARD/immunosuppressant medication category		
csDMARD only (HCQ/MTX/SSZ/LEF monotherapy or combination therapy)	REF	n/a
No DMARD/immunosuppressant	1.38 (0.63-3.02)	0.414
AZA monotherapy	1.39 (0.53-3.65)	0.508
MMF monotherapy	1.65 (0.69-3.96)	0.262
AZA/MMF combination therapy (except combination with RTX or b/tsDMARDs)	0.59 (0.20-1.75)	0.341
CSA/CYC/TAC monotherapy or combination therapy (except RTX/b/tsDMARDs)	1.07 (0.35 –3.25)	0.910
b/tsDMARD monotherapy or combination therapy (except RTX)	1.35 (0.37-4.97)	0.646
RTX (monotherapy or combination therapy with any other drug)	2.59 (1.11-6.06)	0.029
95% CI, 95% confidence interval; AZA, azathioprine; bDMARD, biologic DMARD; CSA, ciclosporin; csDMARD, conventional synthetic DMARD; CYC, cyclophosphamide; DMARD, disease-modifying anti-rheumatic drug; HCQ, hydroxychloroquine; IVIg, intravenous immunoglobulin; LEF, leflunomide; MMF, mycophenolate mofetil; MTX, methotrexate; OR, odds ratio; RTX, rituximab; SSZ, sulfasalazine; TAC, tacrolimus; tsDMARD, targeted synthetic DMARD; IL, interleukin; TNF, tumour necrosis factor; JAKi, Janus kinase inhibitors; IVIg, intravenous immunoglobulin.		