SUPPLEMENTARY MATERIAL

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Supplementary Table 1. Demographic and Biological Characteristics according to Body Mass Index

	BMI, kg/m²					
	<25 n=236		25-29.9 n=310		≥30 n=351	
	n	%	n	%	n	%
Age, years, mean (SD)	71.2 (17.0)		65.5 (15.3)		64.0 (14.9)	
Male sex	126	53.4	209	67.4	200	57.0
Comorbidity						
Hypertension	131	55.5	144	46.5	213	60.7
Diabetes	40	16.9	78	25.2	120	34.2
Chronic heart failure	37	15.7	30	9.7	46	13.1
Chronic respiratory disease	38	16.1	45	14.5	73	20.8
Chronic kidney disease	29	12.3	38	12.3	43	12.3
Chronic hepatic failure	3	1.3	5	1.6	3	0.9
Immunosuppression	20	8.5	14	4.5	8	2.3
Cancer ^a	30	12.7	33	10.6	33	9.4
Haematological malignancy ^a	8	3.4	11	3.5	10	2.8
Biological markers		•	•	•	•	•
CRP 100–199 mg/L	59	25	99	31.9	108	30.8
CRP ≥200 mg/L	21	8.9	50	16.1	46	13.1
Neutrophil count ≥8,000 per μL ^b	45	20.1	62	20.6	62	18.0
Lymphocytes <1,000 per μL ^c	159	71.0	200	66.2	177	51.2
AST ≥2N ^d	34	19.8	69	26.2	87	29.1
Creatinine ≥133 μmol/L ^e	32	14.2	44	14.5	62	17.8

Abbreviations: AST, aspartate aminotransferase; BMI, body mass index; CRP, C-reactive protein; 2N, twice the upper limit of normal value (Norm: 11-34).

^aActive or in remission; ^bData available for 870 patients; ^cData available for 872 patients; ^dData available for 878 patients.

Supplementary Table 2. Biological and Radiologic Findings at Admission

		All patients n=1,045		Non severe disease n=621		Severe disease n=424		Diff. in proportion of the event [Crl]	Pr diff>0
	norm	n	%	n	%	n	%		
Biological findings									
Neutrophil count ≥8,000 per μL ^a	1,800–7,900	192	19.0	73	12.2	119	28.7	-18.1 [-24.5;-11.5]	<0.001
Lymphocyte count ^b <1,000 per μL	1,000-4,000	618	60.9	334	55.9	284	68.3	10.5 [4.9;16.0]	0.990
Haemoglobin ^c <10 g/dL	12–16	66	6.5	42	7.0	24	5.7	-2.9 [-10.8;5.2]	0.232
Platelet count ^c <100 per μL	150–400	61	6.0	35	5.9	26	6.2	-0.2 [-8.2;8.1]	0.483
C-reactive protein ^d			•		•				
<100 mg/L	<4	550	55.3	400	67.6	150	37.2	[Reference]	
100–199 mg/L	<4	308	31.0	155	26.2	153	38.0	-18.1 [-24.0;-12.1]	<0.001
≥200 mg/L	<4	137	13.8	37	6.3	100	24.8	-29.8 [-36.8;-22.6]	<0.001
AST>2N ^e	11–34	211	24.7	76	19.6	135	34.7	-0.2 [-0.23;-0.10]	<0.001
Serum creatinine ^c ≥133 μmol/L	49–90	147	14.4	66	11.1	81	19.2	-9.8 [-16.7;-3.0]	0.002
Lactate ^h ≥2 mmol/L	0.5-1.6	78	12.6	21	7.7	57	16.5	-3.2 [-11.4;5.0]	0.227
Chest CT scan findings									
Compatible lesions with COVID-19 ⁱ		616	89.7	383	87.2	233	94	-6.0 [-13.6;2.0]	0.070

Probabilities near 1 or 0 are both suggestive of an effect, respectively of a positive or negative difference, and are marked in bold.

Abbreviation: AST, aspartate aminotransferase; Crl, credible interval; CT, computed tomography; Diff., difference; 2N, twice the upper limit of normal value; Pr, probability; SD, standard deviation.

^aData available for 1012 patients; ^bData available for 1014 patients; ^cData available for 1019 patients; ^dData available for 995 patients; ^eData available for 853 patients; ^fData available for 856 patients; ^gData available for 1013 patients; ^hData available for 619 patients; ^hData available for 687 patients. Compatible lesions are defined by ground glass opacities with a peripheral distribution.

Supplementary figure 1. Survival analysis depending of the eight-category ordinal scale within the first day of admission

- (A) Classification of the patients according to the eight-category ordinal scale
- (B) Event-free survival (no ICU admission or death)
- (C) Survival (no death)

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Eight-category ordinal scale at admission	Number of
	patients
1: Not hospitalised without limitations of activities	0
2: Not hospitalised, limitation of activities, home oxygen	0
requirement, or both	
3: Hospitalised, not requiring oxygen and no longer requiring	0
ongoing medical care	
4: Hospitalised, not requiring supplemental oxygen but	271
requiring ongoing medical care	
5: Hospitalised, requiring any supplemental oxygen	588
6: Hospitalised, requiring non-invasive ventilation or use of	0
high-flow oxygen devices	
7: Hospitalised, receiving invasive mechanical ventilation or	181
extracorporeal membrane oxygenation	
8 : Death	5



