Table e-1. Demographic, clinical, laboratory characteristics, treatment and clinical outcomes of all included

patients.

patients.	Total (n=173)	non-COVID-19 (n=117)	COVID-19 (n=56)	Difference (95% CI)*		
Demographic and clinical characteristics						
Age, years	72.3 (57.5-80.5)	70.1 (52.9-78.6)	77.0 (67.0-83.8)	7.7 (3.3 to 12.4)		
Female sex	80 (46.2%)	52 (44.4%)	28 (50.0%)	5.6 (-10.3 to 21.4)		
Current smoker	8 (4.6%)	7 (6.0%)	1 (1.8%)	-4.2 (-9.7 to 1.3)		
Comorbidity						
Diabetes	34 (19.7%)	20 (17.1%)	14 (25.0%)	7.9 (-5.3 to 21.1)		
Hypercholesterolemia	47 (27.2%)	35 (29.9%)	12 (21.4%)	-8.5 (-22.1 to 5.1)		
Hypertension	108 (62.4%)	77 (65.8%)	31 (55.4%)	-10.5 (-26.1 to 5.1)		
Coronary heart disease	20 (11.6%)	11 (9.4%)	9 (16.1%)	6.7 (-4.3 to 17.6)		
Malignancy	43 (24.9%)	35 (29.9%)	8 (14.3%)	-15.6 (-28.0 to -3.3)		
Chronic Kidney Disease	7 (4.0%)	5 (4.3%)	2 (3.6%)	-0.7 (-6.8 to 5.4)		
Immunodeficiency	5 (2.9%)	4 (3.4%)	1 (1.8%)	-1.6 (-6.4 to 3.1)		
qSOFA score	0.7(0.6 - 0.7)	0.5 (0.4-0.6)	0.9 (0.7-1.1)	0.4 (0.2 to 0.6)		
Neurological diagnosis						
Cerebrovascular disease	111 (64.2%)	68 (58.1%)	43 (76.8%)	18.7 (4.4 to 32.9)		
Epilepsy	23 (13.3%)	19 (16.2%)	4 (7.1%)	-9.1 (18.6 to 0.4)		
Inflammatory/Infectious disease	9 (5.2%)	9 (7.7%)	0 (0.0%)	-7.7 (-12.5 to -2.9)		
Neoplastic	3 (1.7%)	3 (2.6%)	0 (0.0%)	-2.6 (-5.3 to 0.3)		
Other	27 (15.6%)	18 (15.4%)	9 (16.1%)	0.7 (-10.9 to 12.3)		
Laboratory findings						
White-cell count (mm <sup>3</sup> )	8.4 (6.6-10.6)	8.2 (6.6-10.5)	8.7 (6.7-12.9)	0.7 (-0.5 to 1.8)		
Neutrophil count (mm <sup>3</sup> )	5.9 (4.1-8.2)	5.5 (3.9-8.1)	7.1 (4.9-9.4)	1.3 (0.3 to 2.4)		
Lymphocyte count (mm <sup>3</sup> )	1.4 (1.0-1.9)	1.6 (1.2-2.1)	1.0 (0.8-1.4)	-0.5 (-0.7 to -0.3)		
Platelet count (mm <sup>3</sup> )	228.0 (290.5)	215.0 (175.0-266.0)	262.6 (191.8-311.8)	37.5 (9.0 to 65.0)		
Haemoglobin (g/dl)	13.3 (11.9-14.5)	13.2 (11.8-14.5)	13.4 (12.2-14.7)	0.3 (-0.3 to 1.0)		
C-reactive protein (mg/L)	7.4 (1.8-32.4)	5.3 (1.2-14.9)	28.9 (4.5-70.5)	19.3 (8.4 to 30.8)		
Erythrocyte sedimentation rate (mm/1h)	25.0 (9.5-31.0)	20.0 (1331.3)	53.5 (30.0-84.8)	32.0 (23.0 to 40.0)		
High-sensitivity troponin T, ng/L	16.0 (9.5-31.0)	14.5 (7.8-19.8)	27.0 (13.0-41.0)	11.0 (3.0 to 18.0)		
Lactate dehydrogenase (U/L)	204.9 (168.0-296.5)	184.0 (161.0-214.0)	275.7 (232.5-369.5)	93.0 (72.0 to 116.0)		
Aspartate aminotransferase (U/L)	26.0 (21.0-38.0)	24.0 (20.0-32.0)	37.5 (24.5-60.8)	13.0 (7.0 to 18.0)		
Alanine aminotransferase (U/L)	24.0 (17.0-36.0)	22.0 (15.5-31.0)	32.5 (20.0-43.2)	8.0 (4.0 to 13.0)		
Total bilirubin (µmol/L)	0.60 (0.47-0.85)	0.60 (0.47-0.83)	0.60 (0.46-0.98)	0.03 (-0.07 to 0.13)		
Creatine kinase (U/L)	112.0 (65.0-251.5)	109.0 (64.5-237.5)	117.0 (65.8-343.0)	18.0 (-12.0 to 54.0)		
Creatinine (µmol/L)	0.91 (0.77-1.10)	0.91 (0.76-1.10)	0.94 (0.77-1.11)	0.03 (-0.05 to 0.12)		
Prothrombin time (sec)	11.8 (12.3-13.3)	12.2 (11.6-12.9)	12.7 (12.1-15.2)	0.6 (0.2 to 1.1)		
Activated thromboplastin time (sec)	29.3 (27.3-31.2)	29.3 (27.5-31.3)	29.4 (27.3-31.1)	0.0 (-1.0 to 1.1)		
D-dimer (mg/L)	680.5 (313.3-2239.5)	317.0 (200.0-913.0)	735.5 (329.8 -2710.5)	375.0 (0.0 to 1831.0)		
Fibrinogen (mg/dL)	348.4 (298.5-461.1)	321.0 (288.5-376.1)	484.0 (376.3-600.3)	158.0 (119.0 to 197.0)		
Serum ferritin (µg/L)	377.0 (173.5-706.5)	155.0 (66.5-340.25)	392.0 (194.5-827.0)	230.0 (-12.0 to 772.0)		
Treatments and exams	,	,	,	,		
Antibiotic treatment	55 (31.8%)	19 (16.2%)	36 (64.3%)	48.0 (33.8 to 62.3)		
Antiviral treatment	40 (23.1%)	2 (1.7%)	38 (67.9%)	66.1 (53.7 to 78.6)		
High-flow oxygen therapy	54 (31.2%)	11 (9.4%)	43 (76.8%)	67.4 (55.1 to 79.6)		
Instrumental exams, n	5.0 (4.0-7.0)	5.0 (3.0-7.0)	5.0 (4.0-8.0)	0.0 (-1.0 to 1.0)		
Outcomes	. ,	` '	` ,	,		
In hospital mortality	26 (15.0%)	5 (4.3%)	21 (37.5%)	33.2 (20.0 to 46.4)		
Incident delirium	24 (13.9%)	9 (7.7%)	15 (26.8%)	19.1 (6.5 to 31.7)		
Fever during hospitalization	41 (23.7%)	14 (12.0%)	27 (48.2%)	36.2 (21.9 to 50.6)		
Hospital length of stay, days	5.0 (4.0-8.0)	5.0 (4.0-8.0)	6.0 (3.3-10.0)	1.0 (-1.0 to 2.0)		
Modified Rankin Scale premorbid	1.0 (0.0-2.0)	1.0 (0.0-2.0)	1.0 (1.0-2.0)	0.0(0.0  to  0.0)		
Modified Rankin Scale discharge	2.0 (1.0-4.0)	2.0 (1.0-3.0)	5.0 (2.3-6.0)	2.0 (2.0 to 3.0)		

Data are median (IQR), or n (%). \*For continuous variables, the difference is reported as median difference (95% confidence interval) computed with the Hodges-Lehmann estimate; for categorical variables, the difference is given in percentage points (95% confidence interval). The 95% confidence intervals have not been adjusted for multiple testing and should not be used to infer definitive effects. CI = confidence interval; qSOFA=quick Sequential Organ Failure Assessment.

Table e-2. Demographic, clinical, laboratory characteristics, treatment and clinical outcomes of patients with

cerebrovascular disease.

cereorovascular disease.	Total (n=111)	non-COVID-19 (n=68)	COVID-19 (n=43)	Difference (95% CI)*
Cerebrovascular event				
Transient ischemic attack	13 (11.7%)	8 (11.8%)	5 (11.6%)	-0.3 (-12.6 to 12.0)
Ischemic stroke	85 (76.6%)	50 (73.5%)	35 (81.4%)	6.8 (-8.8 to 22.4)
Haemorrhagic stroke	13 (11.7%)	10 (14.7%)	3 (7.0%)	-7.9 (-19.4 to 3.5)
Demographic and clinical character				
Age, years	76.3 (61.4-82.5)	74.8 (58.3-80.4)	76.9 (66.8-85.2)	5.2 (0.3 to 9.8)
Female sex	49 (44.1%)	28 (41.2%)	21 (48.8%)	7.0 (-12.0 to 26.1)
Current smoker	7 (6.3%)	6 (8.8%)	1 (2.3%)	-6.6 (-14.8 to 1.6)
Comorbidity				
Diabetes	24 (21.6%)	14 (20.6%)	10 (23.3%)	2.4 (-13.6 to 18.3)
Hypercholesterolemia	33 (29.7%)	23 (33.8%)	10 (23.3%)	-11.1 (-28.1 to 5.9)
Hypertension	77 (69.4%)	51 (75.0%)	26 (60.5%)	-15.7 (-33.5 to 2.2)
Coronary heart disease	16 (14.4%)	8 (11.8%)	8 (18.6%)	6.7 (-7.3 to 20.6)
Malignancy	24 (21.6%)	19 (27.9%)	5 (11.6%)	-16.7 (-31.2 to -2.3)
Chronic Kidney Disease	5 (4.5%)	3 (4.4%)	2 (4.7%)	0.2 (-7.8 to 8.2)
Immunodeficiency	4 (3.6%)	3 (4.4%)	1 (2.3%)	-2.2 (-8.8 to 4.5)
qSOFA score	0.7 (0.6-0.8)	0.5 (0.4-0.7)	0.9 (0.7-1.1)	0.4 (0.1 to 0.6)
Laboratory findings	0.7.66.40.6	0.0 (6.6.10.5)	0.0 (6.7.11.7)	0.5 ( 0.7 1.0)
White-cell count (mm <sup>3</sup> )	8.5 (6.6-10.6)	8.3 (6.6-10.5)	8.9 (6.7-11.7)	0.6 (-0.7 to 1.9)
Neutrophil count (mm <sup>3</sup> )	6.1 (4.5-8.5)	5.5 (4.1-8.1)	7.3 (5.0-9.6)	1.4 (0.1 to 2.6)
Lymphocyte count (mm <sup>3</sup> )	1.3 (0.9-1.8)	1.5 (1.2-2.1)	1.0 (0.8-1.4)	-0.5 (-0.7 to -0.2)
Platelet count (mm <sup>3</sup> )	231.0 (181.0-294.0)	211.5 (174.5-264.3)	276.0 (197.0-315.0)	44.0 (9.0 to 75.0)
Haemoglobin (g/dl)	13.2 (11.5-14.6)	12.7 (11.5-14.4)	13.4 (12.1-14.9)	0.7 (-0.1 to 1.5)
C-reactive protein (mg/L)	8.1 (2.0-35.7)	5.1 (1.5-12.9)	28.0 (4.4-71.1)	22.2 (9.5 to 41.6)
Erythrocyte sedimentation rate	25.0 (14.0-50.0)	19.5 (12.3-30.8)	49.0 (29.3-85.0)	30.0 (19.0 to 41.0)
(mm/1h)	16 0 (10 0 20 0)	16 0 (0 2 21 2)	27.0 (10.0 41.0)	0.0 (0.0 + 10.0)
High-sensitivity troponin T, ng/L	16.0 (10.0-29.0)	16.0 (9.3-21.3)	27.0 (10.0-41.0)	9.0 (0.0 to 18.0)
Lactate dehydrogenase (U/L)	220.0 (168.0-277.5)	177.0 (156.8-221.5)	277.7 (239.0-365.0)	99.0 (74.0 to 123.0)
Aspartate aminotransferase (U/L) Alanine aminotransferase (U/L)	27.7 (21.0-38.0) 25.0 (16.0-35.0)	24.0 (21.0-30.5) 20.5 (15.0-27.8)	36.0 (28.0-52.0) 31.0 (20.0-40.7)	12.0 (7.0 to 17.0) 9.0 (4.0 to 14.0)
Total bilirubin (µmol/L)	0.64 (0.48-0.94)	0.64 (0.48-0.91)	0.66 (0.48-1.0)	0.05 (-0.07 to 0.19)
Creatine kinase (U/L)	109.0 (66.0-241.0)	104.5 (65.3-221.5)	114.0 (69.0-337.0)	15.0 (-17.0 to 52.0)
	0.95 (0.77-1.14)	0.95 (0.77-1.14)	0.95 (0.77-1.11)	0.00 (-0.10 to 0.11)
Creatinine (µmol/L)		` ,		
Prothrombin time (sec) Activated thromboplastin time (sec)	12.5 (12.0-14.1) 29.0 (26.8-31.0)	12.4 (11.8-13.0) 29.1 (26.7-31.4)	12.8 (12.2-15.6) 28.6 (27.3-30.7)	0.7 (0.2 to 1.3) -0.2 (-1.3 to 1.1)
D-dimer (mg/L)	693.0 (325.0-2868.0)	317.0 (197.0-437.0)	735.5 (364.3-2910.8)	433.0 (-387.0 to 4195.0)
Fibrinogen (mg/dL)	351.0 (291.0-466.0)	312.0 (261.1-386.4)	471.0 (368.0-545.0)	146.0 (99.0 to 190.0)
Serum ferritin (µg/L)	411.0 (244.0-739.0)	152.0 (38.0-266.0)	452.5 (268.0-871.0)	272.0 (-36.0 to 1028)
Treatments and exams	411.0 (244.0-739.0)	132.0 (36.0-200.0)	432.3 (208.0-8/1.0)	272.0 (-30.0 to 1028)
Antibiotic treatment	39 (35.1%)	11 (16.2%)	28 (65.1%)	48.7 (31.9 to 65.5)
Antiviral treatment	27 (24.3%)	0 (0.0%)	27 (62.8%)	62.8 (48.3 to 77.2)
High-flow oxygen therapy	40 (36.0%)	7 (10.3%)	33 (76.7%)	66.3 (51.7 to 80.9)
Instrumental exams, n	6.0 (4.0-8.0)	6.0 (5.0-8.0)	6.0 (4.0-8.0)	0.0 (-1.0 to 1.0)
Acute phase therapies (ischemic	22 (25.9%)	13 (26.0%)	9 (25.7%)	1.5 (-13.9 to 16.9)
stroke only)	22 (23.570)	13 (20.070)	) (23.170)	1.3 ( 13.5 to 10.5)
Intravenous fibrinolysis	6 (6.1%)	2 (3.4%)	4 (10.0%)	6.3 (-3.3 to 15.9)
Endovascular therapy	10 (10.2%)	8 (13.8%)	2 (5.0%)	-7.3 (-17.3 to 2.7)
Bridging therapy	6 (7.1%)	3 (6.0%)	3 (8.6%)	2.5 (-6.6 to 11.6)
Outcomes	* (/ )	(*****)	2 (0.0.1)	()
In hospital mortality	19 (17.1%)	4 (5.9%)	15 (34.9%)	28.9 (13.6 to 44.2)
Incident delirium	13 (11.7%)	4 (5.9%)	9 (20.9%)	15.0 (1.5 to 28.4)
Fever during hospitalization	29 (26.1%)	8 (11.8%)	21 (48.8%)	36.9 (20.1 to 53.7)
Hospital length of stay, days	5.0 (4.0-8.0)	5.0 (4.0-8.0)	6.0 (4.0-9.0)	1.0 (-1.0 to 2.0)
Modified Rankin Scale premorbid	1.0 (0.0-2.0)	1.0 (0.0-2.0)	1.0 (0.0-1.0)	0.0(0.0  to  0.0)
Modified Rankin Scale discharge	2.0 (1.0-5.0)	2.0 (1.0-3.0)	5.0 (2.0-6.0)	2.0 (2.0 to 3.0)
Good outcome	59 (53.2%)	48 (70.6%)	11 (25.6%)	-46.1 (-63.0 to -29.1)
NIH Stroke Scale admission	5.0 (2.0-15.0)	4.0 (2.0-14.8)	10.0 (3.0-15.0)	2.0 (0.0 to 5.0)
NIH Stroke Scale discharge	3.0 (0.0-10.0)	2.0 (0.0-6.8)	9.0 (1.0-19.0)	4.0 (1.0 to 8.0)

Data are median (IQR), or n (%). \*For continuous variables, the difference is reported as median difference (95% confidence interval) computed with the Hodges-Lehmann estimate; for categorical variables, the difference is given in percentage points (95% confidence interval). The 95% confidence intervals have not been adjusted for multiple testing and should not be used to infer definitive effects. CI = confidence interval; qSOFA=quick Sequential Organ Failure Assessment; combined therapy=intravenous fibrinolysis followed by endovascular therapy