

**Supplemental Table 1.** Clinical results from both ICU control and Patients with COVID-19. All Laboratory results are from first day of ICU admission or first day of study enrolment. p-values determined by Mann Whitney U-test

Laboratory Test	Reporting N Control;COVID	ICU Controls N=19	COVID N=27	p-values
<b>Hematology</b>				
WBC count, x10 <sup>9</sup> /L, median [IQR]	18;27	10.4 [6.53-18.9]	9.60 [6.00-13.3]	0.41
PMN count, x10 <sup>9</sup> /L, median [IQR]	17;27	7.4 [4.0-14]	8.1 [4.9-11.8]	0.98
Lymphocytes, x10 <sup>9</sup> /L, median [IQR]	17;27	1.1 [0.55-1.6]	0.60 [0.40-0.80]	0.030
Hemoglobin, g/L, median [IQR]	18;27	119 [95.0-134]	117 [98.0-130]	0.86
Platelets, x10 <sup>9</sup> /L, median [IQR]	18;27	207 [158-256]	213 [136-269]	0.99
PTT, s, median [IQR]	17;24	33 [31-38]	36 [32-39]	0.45
INR, median [IQR]	18;23	1.2 [1.0-1.4]	1.2 [1.2-1.3]	0.57
D-dimer, mg/L, median [IQR]	11;26	2359 [1058-3069]	1138 [751-3822]	0.32
<b>Inflammation</b>				
Procalcitonin, ng/ml, median [IQR]	4;21	6.8 [0.037-15]	0.28 [0.10-0.65]	0.73
Ferritin, ug/L, median [IQR]	12;27	199 [90.3-488]	1287 [800-2932]	<0.0001
CRP, mg/L, median [IQR]	8;26	135 [10.5-227]	98.3 [67.5-168]	0.92
IL-6, pg/ml, median [IQR]	19;25	51.4 [17.2-143]	66.3 [25.4-138]	0.76
<b>Blood Gases &amp; Pulmonary Function</b>				
MAP, mmHg, median [IQR]	11;26	75 [68-85]	72 [66-83]	0.43
PaO <sub>2</sub> , mmHg, median [IQR]	18;26	95.5 [76.3-114]	81.0 [68.0-92.0]	0.0090
PaCO <sub>2</sub> , mmHg, median [IQR]	18;26	40.0 [35.3-43.3]	37.0 [34.8-43.3]	0.74
FiO <sub>2</sub> , mmHg, median [IQR]	18;27	0.43 [0.35-0.61]	0.50 [0.35-0.60]	0.76
PaO <sub>2</sub> :FiO <sub>2</sub> , mmHg, median, IQR]	18;27	232 [153-272]	163 [136-234]	0.039
ETCO <sub>2</sub> , mmHg, median [IQR]	9;10	32.0 [29.5-33.5]	33.0 [30.0-37]	0.53
PEEP, ml/cmH <sub>2</sub> O, median [IQR]	12;13	8 [5-10]	10 [8-12]	0.27
Minute ventilation, L/min, median [IQR]	11;13	8.6 [8.1-10]	10 [8.9-11]	0.31
SpO <sub>2</sub> , %, median [IQR]	10;6	0.95 [0.94-0.97]	0.96 [0.90-0.97]	>0.99
<b>Electrolytes</b>				
Temp, C°, median [IQR]	17;26	37.0 [36.8-37.2]	37.2 [37.0-38.0]	0.039
pH, median [IQR]	18;26	7.4 [7.4-7.4]	7.4 [7.3-7.5]	0.85
HCO <sub>3</sub> , meq/L, median [IQR]	18;27	25 [22-27]	24 [21-25]	0.40
Na, mmol/L, median [IQR]	18;27	138 [134-139]	137 [132-140]	0.55
K, mmol/L, median [IQR]	18;27	4.0 [3.7-4.5]	4.0 [3.6-4.2]	0.51
<b>Hepatic &amp; Renal Function</b>				
Albumin, g/L, median [IQR]	18;27	27 [24-34]	25 [22-31]	0.44
Bilirubin, μmol/L, median [IQR]	17;27	10 [7.0-16]	11 [7.0-22]	0.70
AST, U/L, median [IQR]	17;27	34 [23-64]	82 [41-111]	0.0030
ALT, U/L, median [IQR]	17;27	29 [18-49]	84 [30-121]	0.0013
LDH, U/L, median [IQR]	17;27	257 [200-302]	398 [286-478]	0.0003
Creatinine, μmol/L, median [IQR]	18;27	105 [59.8-145]	99.0 [72.0-133]	0.84