**Supplemental Digital Content 1.** Summary characteristics at the admission of patients with relevant COVID-19 by the need of critical care.

|  | **Total** | **Favorable outcome** | **Critical care** | **Mean Posterior prob****β>0** |
| --- | --- | --- | --- | --- |
|  | **N=214** | **N=162** | **n=52** |
| Syndromes |  |  |  |  |
| Mild  | 42 (19.6%) | 39 (24.1%) | 3 (5.77%) | - |
| Bronchopulmonary  | 110 (51.4%) | 87 (53.7%) | 23 (44.2%) | 0.98 |
| Gastrointestinal  | 25 (11.7%) | 23 (14.2%) | 2 (3.85%) | 0.44 |
| MIS-C | 37 (17.3%) | 13 (8.02%) | 24 (46.2%) | 1.00 |
| Age in months |  |  |  |  |
| Median [IQR] | 64.3 [4.67-138] | 47.9 [3.55-130] | 113 [29.8-150] | 0.99 |
| ≤ 2 years | 81 (37.8%) | 68 (42%) | 13 (25%) | 0.99 |
| Sex |  |  |  |  |
| Male | 126 (58.9%) | 94 (58%) | 32 (61.5%) | - |
| Female | 88 (41.1%) | 68 (42%) | 20 (38.5%) | 0.34 |
| Weight percentile |  |  |  |  |
| Median [IQR] | 46.5 [13.0- 75.0] | 44.5 [13.5-75.0] | 52.0 [13.0- 74.2] | 0.44 |
| High (≥p90) | 25/192 (13%) | 18/146 (12.3%) | 7/46 (15.2%) | 0.33 |
| Close contact |  |  |  |  |
|  Yes | 107 (50%) | 87 (53.7%) | 20 (38.5%) | 0.01 |
| Unknown | 23 (10.7%) | 17 (10.5%) | 6 (11.5%) |  |
| Comorbidities (including malignancies and immunosuppressors) | 93/203 (45.8%) | 64/153 (41.8%) | 29/50 (58%) | 0.98 |
| Full regimen of influenza vaccine | 25 (11.7%) | 19 (11.7%) | 6 (11.5%) | - |
| Codetection |  |  |  |  |
| Virus-Virus | 11/111 (9.91%) | 5/75 (6.67%) | 6/36 (16.7%) | 0.8 |
| Virus-Bacteria | 31/111 (27.9%) | 20/75 (26.7%) | 11/36 (30.6%) | 0.95 |
| Temperature (ºC) at arrival |  |  |  |  |
| Median [IQR] | 37.6 [36.5- 38.2] | 37.5 [36.5- 38.2] | 37.8 [36.6-38.3] | 0.83 |
| High (≥38ºC) | 82 (39.6%) | 59 (37.6%) | 23 (46%) | 0.86 |
| Fever days |  |  |  |  |
| Median [IQR] | 3 [0-7] | 2 [0-5] | 6 [3-9] | 0.99 |
| ≥5 days | 64/166 (38.3%) | 39/125 (31.2%) | 25/41 (61%) | 0.99 |
| Tachycardia for age/sex | 54/205 (26.3%) | 30/153 (19.5%) | 24/51 (47.1%) | 0.99 |
| Tachypnoea for age/sex | 46/130 (35.4%) | 26/92 (28.3%) | 20/38 (52.6%) | 0.99 |
| Hypotension at admission (for age/sex) | 15/139 (10.8%) | 6/94 (6.38%) | 9/45 (20%) | 0.98 |
| Oxygen saturation, Median [IQR] | 98 [96-99] | 98 [96-99] | 97 [94-99] | 0.01 |
| ≤97% | 97/202 (48%) | 69/150 (46%) | 28/52 (53.8%) | 0.83 |
| Hemoglobin (g/dL) |  |  |  |  |
| Median [IQR] | 11.8 [10.0- 13.2] | 12.1 [10.6- 13.6] | 10.1 [8.5- 12.2] | 0.0001 |
| Anemia for age/sex | 119/202 (58.9%) | 82/150 (54.7%) | 37/52 (71.2%) | 0.98 |
| Platelets (mm3) |  |  |  |  |
|  Median [IQR] | 239500 [161000-405000] | 269000 [187250-416750] | 184000 [95750-274250] | 0.98 |
|  Platelets ≤220000  | 88/202 (43.6%) | 53/150 (35.3%) | 35/52 (67.3%) | 0.99 |
| Leucocytes (mm3) |  |  |  |  |
| Median [IQR] | 8020 [4962-12930] | 7935 [5125-12180] | 9260 [4380-15868] | 0.94 |
| Leukocytosis (>15.000) | 40/202 (19.9%) | 25/150 (16.8%) | 15/52 (28.8%) | 0.96 |
| Lymphocytes (mm3) |  |  |  |  |
| Median [IQR] | 1700 [810-2900] | 1820 [1070-3760] | 855 [430-2022] | 0.0003 |
| Lymphopenia for age | 85/201 (42.3%) | 52/201 (34.9%) | 33/52 (63.5%) | 0.99 |
| Neutrophils (mm3) |  |  |  |  |
| Median [IQR] | 4180 [1892-8845] | 3640 [1700-7080] | 6410 [2430-12995] | 0.99 |
| Neutrophilia (>10.000) | 46/200 (23%) | 27/149 (18.1%) | 19/51 (37.3%) | 0.99 |
| Ratio Neutrophils/Lymphocytes |  |  |  |  |
| Median [IQR] | 2.39 [1.0- 6.54] | 1.93 [0.80- 3.74] | 5.12 [2.20- 14.19] | 0.99 |
| AST (U/L), Median [IQR] | 36 [26-58]N=159 | 34 [26-46]N=111 | 44 [31-80]N=48 | 0.97 |
| ALT (U/L) |  |  |  |  |
| Median [IQR] | 36 [26-58] | 34 [26-46] | 44 [31-80] | 0.96 |
| ≥ 37 | 67/177 (37.9%) | 39/126 (31%) | 28/51 (54.9%) | 0.98 |
| C-reactive protein (mg/L) |  |  |  |  |
| Median [IQR] | 26.3 [3.98-108] | 14.0 [2.00- 69.5] | 122 [34.1-254] | 0.99 |
| High for age/sex | 127/200 (63.5%) | 85/149 (57%) | 42/51 (82.4%) | 0.99 |
| Procalcitonin (ng/mL) |  |  |  |  |
| Median [IQR] | 0.34 [0.10- 2.70] | 0.16 [0.08- 0.62] | 2.73 [0.62- 10.6] | 0.99 |
| ≥ 0.5 ng/mL | 67/148 (45.3%) | 30/100 (30%) | 37/51 (77.1%) | 0.99 |
| Albumin (g/dL), Median [IQR] | 3.60 [2.80- 4.20]N=109 | 3.90 [3.40- 4.40]N=65 | 3.05 [2.50- 3.65]N=44 | 0.001 |
| Serum sodium (mmol/L) |  |  |  |  |
| Median [IQR] | 136 [134-139] | 136 [134-138] | 136 [133-140] | 0.27 |
| Hyponatremia (<135) | 52/178 (29.2%) | 33/127 (26%) | 19/51 (37.3%) | 0.92 |
| Lactate dehydrogenase (U/L), Median [IQR] | 328 [262-444]N=142 | 320 [254-435]N=94 | 350 [285-445]N=48 | 0.99 |
| D-Dimer (ng/mL) |  |  |  |  |
| Median [IQR] | 1380 [590-3428] | 1071 [485-2112] | 2896 [957-5515] | 0.79 |
| ≥500 | 93/123 (75.6%) | 61/83 (73.5%) | 32/40 (80%) | 0.78 |
| IL-6 (pg/mL) |  |  |  |  |
| Median [IQR] | 84.1 [20.5-267] | 27.2 [11.4-86.3] | 185 [44.2-436] | 0.99 |
| ≥8.5 | 55/63 (87.3%) | 22/28 (78.6%) | 33/35 (94.3%) | 0.96 |
| Ferritin (ng/mL) |  |  |  |  |
| Median [IQR] | 383 [127-919] | 196 [74.5-604] | 686 [375-1752] | 0.99 |
| Ferritin high for age/sex | 78/101 (77.2%) | 45/63 (71.4%) | 33/38 (86.8%) | 0.96 |
| Urea (mg/dL), Median [IQR] | 23.5 [16.2- 34.6]N=154 | 23.0 [16.0- 29.8]N=107 | 27.0 [17.5- 43.5]N=47 | 0.99 |
| Creatinine (mg/dL) |  |  |  |  |
| Median [IQR] | 0.43 [0.27- 0.56] | 0.41 [0.26-0.53] | 0.47 [0.36- 0.75] | 0.99 |
| ≥0.7 | 31/190 (16.3%) | 16/138 (11.6%) | 15/52 (28.8%) | 0.99 |
| NT-proBNP (pg/mL), Median [IQR] | 8992 [4051-14407]N=25 | 6674 [3988-8843]N=9 | 10146 [4718-19380]N=16 | 0.95 |
| Troponin I (ng/mL), Median [IQR] | 3.40 [0.06- 44.9]N=22 | 6.26 [0.06- 25.6]N=6 | 3.40 [0.10- 54.4]N=16 | 0.86 |
| Respiratory support | 89 (41.6%) | 45 (27.8%) | 44 (84.6%) | 1.00 |
| Oxygen in cannula only in the ward | 48 (22.4%) | 45/162 (27.8%) | 3/11 (27.3%) | 0.45 |
| Days of oxygen therapy (including start day), Median [IQR] | 4 [2.00-8.00] | 3.00 [2.00- 4.50] | 7.50 [3.00-11.8] | 0.99 |
| Complications (including shock) | 83 (38.8%) | 39 (24.1%) | 44 (84.6%) | 0.99 |
| Shock | 23 (10%) | 0 (0%) | 23 (41%) | 0.99 |
| Pleural effusion | 13 (6.07%) | 1 (0.61%) | 12 (23.07%) | 0.99 |
| Not complicated | 12 (5.6%) | 1 (0.6%) | 11 (21.1%) | - |
| Complicated  | 1 (0.47%) | 0 (0%) | 1 (1.9%) | 0.61 |
| Pneumothorax | 3 (1.40%) | 0 (0%) | 3 (5.7%) | 0.98 |
| Cardiological complications | 31 (14.4%) | 10 (6%) | 21 (40.3%) | 0.95 |
| Pericarditis | 6 (2.8%) | 0 (0%) | 6 (11.5%) | 0.99 |
| Valve dysfunction | 9 (4.2%) | 2 (1.2%) | 7 (13.4%) | 0.83 |
| Arrhythmia | 8 (3.7%) | 0 (0%) | 8 (15.3%) | 0.97 |
| Coronary abnormalities | 3 (1.4%) | 0 (0%) | 3 (5.7%) | 0.93 |
| Aneurysms | 1 (0.4%) | 0 (0%) | 1 (1.9%) | 0.77 |
| Sepsis | 14 (6.5%) | 1 (0.6%) | 13 (25%) | 0.99 |
| Renal failure | 10 (4.6%) | 2 (1.2%) | 8 (15.3%) | 0.99 |
| Thrombosis | 4 (1.8%) | 0 (0%) | 4 (7.6%) | 0.99 |
| Pneumothorax | 3 (1.4%) | 0 (0%) | 3 (5.7%) | 0.99 |
| Hematemesis | 2 (0.9%) | 0 (0%) | 2 (3.8%) | 0.99 |
| Days of admission, Median [IQR] | 6.00 [4.00-10.00] | 5.00 [4.00-8.00] | 11.00 [8.00-18.5] | 0.98 |
| PICU admission: | 48 (22.4%) | 0 (0%) | 48 (92.3%) | - |
| Days of PICU admission, Median [IQR] | 5.00 [3.00-8.00] |  | 5.00 [3.00-8.00] |  |

The posterior probability of β>0, is displayed (from 0 to 1).

C-reactive protein was considered high for boys if greater than 15 mg/L (0 to 90 days), 11 (91 days to 3 years), 7.9 (4 to 10 years), 7.6(11 to 14 years) and 7.9 (15 to 18 years).

C-reactive protein was considered high for girls if greater than 15 mg/L (0 to 90 days), 7.9 (91 days to 3 years), 10 (4 to 10 years), 8.1 (11 to 14 years) and 7.9 (15 to 18 years).

Ferritin was considered high if greater than 400 mg/dL (0 to 6 weeks), 95 (7 weeks to 1 year), 60 (1 to 9 years) and 300 (10 to 18 years)

LDH was considered high if greater than 580 mg/dL (<1 year), 500 (1 to 9 years) and 330 (10 to 19 years).

Full blood count laboratory values for age used can be found atDallman PR. Developmental Changes in Number in leukocytes. En: Rudolph A, editor. Rudolph’s Pediatrics. 19th ed. New York: Appleton & Lange- 1991. p. 1142-3. Biochemistry values used can be found in Reference values for Laboratory Tests. Part 727. Kliegman, R. (2020). *Nelson textbook of paediatrics* (Edition 21.). Philadelphia, PA: Elsevier.