**Supplementary Table S1. Laboratory findings for RP and non-RP patients.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Normal Range** | **All patients** | **RP patients** | **NRP patients** | **p value** |
| CD45+, μg/L | 1488-4483 | 1446.0 (1126.0-1789.0) | 1440.0 (1195.0-1631.0) | 1451.0 (1103.0-1815.0) | 0.708 |
| First week |  | 1262.0 (1144.0-1789.0) | 1195.0 (1144.0-1815.0) | 1321.0 (1017.0-1789.0) | 1.000 |
| Second week |  | 1343.0 (805.0-1770.0) | 1292.0 (1250.0-1334.0) | 1414.0 (790.0-2090.0) | 0.655 |
| Third week |  | 1439.0 (1103.0-1631.0) | 1523.0 (1087.0-1675.0) | 1424.0 (1103.0-1629.0) | 0.836 |
| CD3+CD45+, μg/L | 955-2860 | 1008.5 (757.5-1233.5) | 1064.0 (754.0-1272.0) | 1002.0 (761.0-1221.0) | 0.615 |
| First week |  | 996.0 (754.0-1339.0) | 999.0 (754.0-1289.0) | 987.0 (677.0-1368.5) | 1.000 |
| Second week |  | 1000.0 (616.8-1274.5) | 1054.5 (980.0-1129.0) | 1000.0 (601.5-1351.0) | 0.858 |
| Third week |  | 1002.5 (774.0-1188.5) | 1119.0 (810.5-1315.5) | 994.0 (774.0-1149.0) | 0.340 |
| CD3+CD4+, μg/L | 550-1440 | 583.5 (418.0-719.0) | 564.0 (397.0-692.0) | 592.0 (425.0-722.0) | 0.526 |
| First week |  | 500.0 (385.0-647.0) | 396.0 (385.0-648.0) | 502.0 (387.8-632.0) | 0.773 |
| Second week |  | 542.8 (339.5-788.5) | 462.5 (424.0-501.0) | 585.3 (334.0-800.0) | 0.593 |
| Third week |  | 612.8 (426.0-711.0) | 593.0 (471.0-708.5) | 612.8 (426.0-711.0) | 0.968 |
| Monocyte, ×109 /L | 0.1-0.6 | 0.4 (0.3-0.5) | 0.4 (0.3-0.4) | 0.4 (0.3-0.5) | 0.923 |
| First week |  | 0.4 (0.3-0.5) | 0.4 (0.3-0.5) | 0.4 (0.3-0.5) | 0.502 |
| Second week |  | 0.4 (0.3-0.5) | 0.4 (0.3-0.4) | 0.4 (0.3-0.5) | 0.334 |
| Third week |  | 0.4 (0.3-0.5) | 0.4 (0.3-0.5) | 0.4 (0.3-0.5) | 0.767 |
| Alanine aminotransferase, U/L | 9-50 | 21.9 (15.9-32.0) | 19.7 (14.5-30.8) | 22.0 (16.0-32.0) | 0.521 |
| First week |  | 20.3 (14.0-30.9) | 19.7 (13.9-33.7) | 20.4 (14.1-30.0) | 0.950 |
| Second week |  | 21.4 (15.0-38.2) | 17.1 (14.8-33.7) | 22.2 (15.3-39.7) | 0.315 |
| Third week |  | 25.4 (16.6-36.5) | 21.9 (13.7-36.1) | 26.0 (17.4-36.7) | 0.333 |
| Aspartate aminotransferase, U/L | 15-40 | 18.7 (15.4-23.7) | 17.4 (15.2-20.6) | 18.7 (15.4-24.1) | 0.317 |
| First week |  | 19.8 (16.2-27.5) | 19.0 (15.8-24.0) | 19.8 (16.4-27.8) | 0.395 |
| Second week |  | 17.5 (14.2-22.3) | 15.2 (14.4-19.6) | 17.5 (14.0-23.2) | 0.258 |
| Third week |  | 17.9 (14.3-23.1) | 15.8 (14.6-19.7) | 18.1 (14.3-23.3) | 0.207 |
| GFR, mL/min/1.73 m2 | 90-120 | 132.2 (110.6-154.8) | 138.7 (116.9-161.1) | 131.9 (109.2-151.9) | 0.496 |
| First week |  | 137.6 (113.2-162.0) | 138.7 (121.1-164.2) | 137.6 (111.7-161.0) | 0.614 |
| Second week |  | 126.6 (108.1-147.5) | 121.4 (105.9-140.8) | 126.9 (108.6-148.6) | 0.698 |
| Third week |  | 124.4 (104.4-143.6) | 123.9 (104.8-147.6) | 125.4 (104.4-143.3) | 0.900 |
| PaO2, mmHg | 83-108 | 96.1 (83.0-113.0) | 92.3 (83.2-107.0) | 96.1 (83.0-115.0) | 0.508 |
| First week |  | 93.0 (79.6-107.1) | 92.4 (83.2-104.0) | 93.1 (79.3-108.0) | 0.973 |
| Second week |  | 104.0 (85.5-133.4) | 107.0 (86.0-111.0) | 103.0 (84.4-137.0) | 0.921 |
| Third week |  | 101.0 (86.8-123.8) | 100.0 (87.5-110.7) | 101.0 (86.8-126.0) | 0.635 |
| Hemoglobin, g/L | 115-150 | 136.0 (123.5-146.0) | 137.0 (125.0-143.0) | 136.0 (123.0-146.0) | 0.937 |
| Red blood cell, × 109 per L | 3.8-5.1 | 4.4 (4.1-4.8) | 4.5 (4.3-4.8) | 4.4 (4.1-4.8) | 0.230 |
| Hematocrit, % | 35-45 | 40.1 (36.5-42.6) | 40.0 (38.5-41.6) | 40.1 (36.4-42.6) | 0.947 |
| Platelet count, × 109 per L | 125-350 | 186.5 (150.5-231.5) | 198.0 (163.0-231.0) | 186.0 (148.0-232.0) | 0.528 |
| Albumin, g/L | 40-55 | 40.1 (36.7-42.5) | 41.8 (38.9-44.7) | 39.9 (36.2-42.3) | 0.005 |
| Total bilirubin, mmol/L | 0-21 | 9.6 (6.7-13.8) | 10.9 (8.8-20.0) | 9.5 (6.7-13.6) | 0.118 |
| Potassium, mmol/L | 3.4-4.5 | 0.09 (0.04-30.0) | 3.6 (3.3-3.8) | 3.6 (3.3-3.9) | 0.766 |
| Sodium, mmol/L | 136-146 | 140.0 (138.0-142.0) | 140.6 (140.0-143.0) | 140.0 (138.0-142.0) | 0.100 |
| Chlorine, mmol/L | 98-106 | 105.0 (103.0-107.0) | 105.0 (103.0-108.0) | 105.0 (103.0-106.0) | 0.422 |
| Anion gap, mmol/L | 10-14 | 10.2 (8.9-11.2) | 10.6 (9.4-12.0) | 10.2 (8.9-11.2) | 0.193 |
| Blood PH | 7.35-7.45 | 7.39 (7.37-7.42) | 7.39 (7.37-7.41) | 7.39 (7.37-7.42) | 0.848 |
| PaCO2, mmHg | 35-45 | 41.0 (38.1-44.0) | 41.6 (39.5-43.3) | 40.8 (38.0-44.5) | 0.679 |
| Blood oxygen saturation, % | 92-98 | 98.0 (96.9-98.8) | 98.0 (97.0-99.0) | 98.0 (96.9-98.7) | 0.457 |
| Respiratory index, % | 0-10 | 21.0 (5.0-51.0) | 14.5 (4.5-24.5) | 22.0 (5.0-51.0) | 0.235 |
| B-type Natriuretic Peptide, pg/ml | 0-400 | 34.0 (11.0-61.0) | 17.0 (12.0-27.0) | 35.5 (10.5-62.5) | 0.581 |
| Myoglobin, μg/L | 14.3-65.8 | 14.9 (8.9-22.1) | 15.4 (11.8-18.5) | 14.8 (8.6-22.2) | 0.665 |
| Troponin I, μg/L | 0-0.03 | 0.004 (0.001-0.009) | 0.005 (0.001-0.038) | 0.004 (0.001-0.009) | 0.838 |
| Urine specific gravity | 1.003-1.030 | 1.018 (1.013-1.022) | 1.018 (1.013-1.021) | 1.018 (1.013-1.023) | 0.666 |
| Urine leukocyte, P/μl | 0-12 | 2.9 (0.9-8.5) | 1.5 (0.0-5.9) | 2.9 (0.9-8.9) | 0.037 |
| Urinary Erythrocytes, P/μl | 0-10 | 1.3 (0.0-3.9) | 1.3 (0.0-2.9) | 1.3 (0.0-5.3) | 0.370 |
| Urea, mmol/L | 2.6-8.8 | 3.8 (3.2-4.5) | 3.7 (3.4-4.5) | 3.8 (3.1-4.6) | 0.563 |
| Uric acid, μmol/L | 155-357 | 284.2 (228.8-365.0) | 309.0 (248.9-413.0) | 282.8 (225.3-362.9) | 0.126 |
| Total bilirubin, μmol/L | 0-21 | 9.6 (6.7-13.8) | 10.9 (8.8-20.0) | 9.5 (6.7-13.6) | 0.118 |
| AST/ALT | 0.8-1.5 | 1.0 (0.8-1.3) | 0.9 (0.7-1.3) | 1.0 (0.8-1.3) | 0.264 |
| Total protein, g/L | 65-85 | 68.4 (65.0-71.3) | 70.6 (66.9-72.1) | 68.0 (64.8-71.1) | 0.037 |
| Globulin, g/L | 20-40 | 28.6 (26.1-30.8) | 29.0 (25.9-30.1) | 28.5 (26.2-30.9) | 0.432 |
| Plasma prothrombin time, s | 11-15 | 13.5 (13.1-14.0) | 13.4 (13.0-13.6) | 13.5 (13.1-14.0) | 0.138 |
| Thrombin time, s | 13-21 | 16.1 (15.5-16.9) | 16.3 (15.6-17.0) | 16.1 (15.5-16.9) | 0.355 |
| Plasma fibrinogen, g/L | 2.0-4.0 | 3.7 (2.9-4.5) | 3.1 (2.7-4.0) | 3.8 (3.0-4.7) | 0.082 |
| Creatine kinase isoenzyme, U/L | 0-24 | 10.9 (8.9-14.6) | 10.7 (8.5-13.6) | 11.0 (9.1-14.8) | 0.437 |

Data of the indicators that have been measured many times are median (IQR) value of first three weeks after admission. Others are data at admission. In the first, second and third weeks, the number of available test results of RP patients were 27, 27, 19, in contrast, 258, 249, 184 in NRP patients. P values comparing RP and NRP patients are from Mann-Whitney U test. GFR=glomerular filtration rate. ALT=Alanine aminotransferase. AST=Aspartate aminotransferase. RP=redetectable as positive. NRP=non-redetectable as positive.

**Supplementary Table S2. Clinical characteristics, treatment and laboratory findings of 27 RP patients at first admission and readmission**

|  |  |  |  |
| --- | --- | --- | --- |
| **Characteristics** | **First-admission** | **Readmission** | **p value** |
| Hospitalization, days | 18.0 (13.0-24.0) | 7.0 (5.0-11.0) | <0.001 |
| **Severity** |  |  |  |
| Mild | 3 (11.1) | 20 (74.1) | <0.001 |
| Moderate | 24 (88.9) | 7 (25.9) | .. |
| **Symptoms** |  |  |  |
| Asymptomatic | 5 (18.5) | 17 (62.9) | 0.013 |
| Fever | 18 (66.7) | 1 (3.7) | .. |
| Dry cough | 14 (51.6) | 6 (22.2) | .. |
| Myalgia | 1 (3.7) | 2 (7.4) | .. |
| Expectoration | 6 (22.2) | 2 (7.4) | .. |
| Pharyngalgia | 0 | 1 (3.7) | .. |
| Dizziness | 2 (7.4) | 1 (3.7) | .. |
| Headache | 1 (3.7) | 1 (3.7) | .. |
| **Treatment** |  |  |  |
| Oxygen inhalation | 17 (62.9) | 8 (29.6) | .. |
| Antiviral therapy | 23 (85.2) | 1 (3.7) | .. |
| Antibiotic therapy | 20 (74.1) | 3 (11.1) | .. |
| Hydrogen and oxygen atomizer | 0 (0) | 1 (3.7) | .. |
| Traditional Chinese medicine | 17 (62.9) | 5 (18.5) | .. |
| Hormone | 4 (14.8) | 0 | .. |
| **Laboratory findings** |  |  |  |
| Ct values (N gene) | 35.0 (33.0-37.0) | 37.5 (36.0-38.5) | 0.042 |
| Ct values (ORF gene) | 35.0 (32.0-38.0) | 40.0 (37.0-40.0) | 0.065 |
| Antibody for SARS-CoV-2\*\* |  |  |  |
| IgG | 20 (100.0) |  |  |
| IgM | 16 (80.0) |  |  |
| CD45+ | 1440.0 (1144.0-1719.0) | 1555.0 (1195.0-1696.0) | 0.273 |
| CD3+ CD45+ | 1047.0 (754.0-1289.0) | 942.0 (842.0-1076.0) | 0.237 |
| CD3+ CD4+ | 564.0 (396.0-692.0) | 553.0 (460.0-692.0) | 0.484 |
| CD3+ CD8+ | 433.0 (324.0-592.0) | 346.0 (311.0-505.0) | 0.499 |

Data are median (IQR) or n (%). \*Results of CT scan for first admission were shown in Table 1. **\*\***Only 20 RP patients have tested for Antibody. Results of Ct values and CD cell were median value during hospitalization. RP=redetectable as positive. NRP=non-redetectable as positive.