**Supplementary Table 1. Clinical and laboratory findings at ICU admission and treatment received prior to plasma exchange**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Patient 1** | **Patient 2** | **Patient 3** | **Patient 4** | **Normal value/range** |
| Age, years | 49 | 59 | 56 | 64 |  |
| Sex | Male | Male | Male | Male |  |
| Current smoking | - | Yes | - | - |  |
| Active alcoholism  | - | - | - | Yes |  |
| **Any comorbidity** |  |  |  |  |  |
|  Type 2 diabetes mellitus | Yes | Yes | - | Yes |  |
|  Hypertension  | Yes | Yes | Yes | Yes |  |
|  Obesity | Yes | - | Yes | - |  |
|  Chronic pulmonary obstructive disease | - | Yes | - | - |  |
|  Liver cirrhosis | - | - | - | Yes |  |
|  Solid organ transplantation | - | Yes | - | - |  |
| **Signs and symptoms** |  |  |  |  |  |
|  Days from illness onset to ICU admission | 9 | 10 | 4 | 6 |  |
|  Cough | Yes | Yes | - | Yes |  |
|  Dyspnea | Yes | Yes | Yes | Yes |  |
|  Diarrhea | - | Yes | Yes | Yes |  |
|  Fever | Yes | Yes | - | - |  |
| **Laboratory** |  |  |  |  |  |
|  WBC, x109 per L | 10.38 | 6.29 | 25.93 | 1.88 | 4.0-11.0 |
|  Neutrophil count, x109 per L | 9.2 | 5.6 | 19.60 | 1.6 | 2.0-7.0 |
|  Lymphocyte count, x109 per L | 0.6 | 0.4 | 3.0 | 0.2 | 0.9-4.5 |
|  Hematocrit, % | 35 | 31 | 49 | 23 | 40-50 |
|  Platelet count, x109 per L | 220 | 182 | 52 | 43 | 130-400 |
|  INR | 1.21 | 1.08 | 1.17 | 1.32 | 0.8-1.1 |
|  D-dimer, ng/mL | 4900 | 1300 | >10.000 | 900 | <500 |
|  C reactive protein, mg/dL  | 14.65 | 8.65 | 22.76 | 2.34 | <1.0 |
|  Procalcitonin, ng/mL | 0.22 | 0.36 | 2.93 | 0.23 | <0.5 |
|  Creatinine, mg/dL | 1.44 | 2.01 | 2.36 | 2.41 | 0.3-1.3 |
|  Aspartate aminotransferase, U/L | 69 | 58 | 39 | 58 | 5-40 |
|  Alanine aminotransferase, U/L | 65 | 60 | 9 | 26 | 5-40 |
|  Bilirubin, mg/dL | 0.4 | 0.5 | 1.0 | 1.2 | <1.2 |
|  Lactate dehydrogenase, U/L | 449 | 429 | 682 | 426 | <234 |
|  High sensitivity troponin I, ng/L | 6.6 | 52.5 | 224 | 19.8 | <45.2 |
|  Ferritin, ng/mL | 2005 | 2780 | 1396 | 464 | 20-400 |
|  Triglyceride, mg/dL | 752 | 344 | 132 | 109 | <150 |
| **Prognostic scores at admission** |  |  |  |  |  |
|  SOFA, points | 6 | 7 | 9 | 11 |  |
|  APACHE II, points | 13 | 26 | 23 | 23 |  |
| **Treatment before PE** |  |  |  |  |  |
|  Antiviral therapy | Yes | Yes | Yes | Yes |  |
|  Antibiotic therapy | Yes | Yes | Yes | Yes |  |
|  Use of corticosteroids | Yes | Yes | Yes | Yes |  |
|  Other biological therapy | Tocilizumab | Anakinra | - | - |  |
| **Complications prior to PE** |  |  |  |  |  |
|  Acute respiratory distress syndrome | Yes | Yes | Yes | Yes |  |
|  Pulmonary and arterial thromboembolism | - | - | Yes | - |  |
|  Acute kidney injury | Yes | Yes | Yes | Yes |  |
|  Myocarditis | - | Yes | - | - |  |
|  Shock  | Yes | Yes | Yes | Yes |  |
|  Proven bacterial infection  | - | - | - | - |  |
| **Organ support prior to PE** | - | - | - | - |  |
|  Invasive mechanical ventilation | Yes | Yes | - | Yes |  |
|  Days from ICU admission to intubation | 0 | 0 |  | 1 |  |
|  Vasopressors  | Yes | Yes | Yes | Yes |  |
|  Renal replacement therapy | Not required | Not required | Not required | Not required |  |

ICU: intensive care units; PE: plasma exchange; WBC: White blood cell count; INR: international normalized ratio; SOFA: sequential organ failure score; APACHE: Acute physiological and chronic health evaluation