Supplementary Table 1: Baseline characteristics and patient clinical course of the sample population

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| **VARIABLE** | **Study sample**  **(n = 116)** |
| **Demographics** | |
| Median age - yrs (IQR) | 11 (7 - 14) |
| Male (%) | 76 (66%) |
| Ethnicity   * Afro-Caribbean (%) * Asian (%) * Caucasian (%) * Other (%) | 51 (45%)  29 (26%)  24 (21%)  9 (8%) |
| Median BMI - kg/m2 (IQR) | 20.6 (16.4 - 25.3) |
| **Co-morbidities**  Asthma  Cystic Fibrosis  Type-1 Diabetes  Autism  Others **(**psoriasis, learning difficulties, sickle cell disease, Wilm’s tumour, San-Fillipo syndrome, etc) | 20  5  3  1  1  10 |
| **SARS-CoV-2 status** | |
| SARS CoV-2 PCR (%) | 19 (16%) |
| **SARS-CoV-2** **IgG** | |
| Not done | 42 (36%) |
| Negative | 18 (16%) |
| Positive | 56 (48%) |
| **Symptoms on admission** | |
| Median duration of symptoms in days (IQR) | 5 (4 - 7) |
| Fever (%) | 116 (100%) |
| Respiratory distress (%) | 23 (20%) |
| Abdominal pain (%) | 79 (68%) |
| Diarrhoea (%) | 67 (58%) |
| Vomiting (%) | 64 (55%) |
| Confusion (%) | 22 (20%) |
| **Admission parameters** |  |
| Median PIM3 score % (IQR) | 4.1 (1.4 - 6.3) |
| Vasodilated shock (%) | 57 (49%) |
| Vasoconstricted shock (%) | 14 (12%) |
| Median lactate mmol/L(IQR) | 1.6 (1.2 - 2.7) |
| Median Ferritin, micrograms/L (IQR) | 554 (224 - 1169) |
| Median C-reactive protein, mg/L (IQR) | 206 (120 - 284) |
| Median D-Dimers, ng/ml (IQR) | 3760 (2332 - 7310) |
| Median lactate dehydrogenase, IU/L (IQR) | 424 (286 - 728) |
| Median creatine kinase, IU/L (IQR) | 90 (43 - 278) |
| Median pro-BNP, pg/ml (IQR) | 5143 (1542 - 14017) |
| Median troponin, ng/L (IQR) | 200 (25 - 809) |
| **Renal parameters** |  |
| Admission AKI status  No AKI (%)   * Stage 1 AKI (%) * Stage 2 AKI (%) * Stage 3 AKI (%) | 78 (67%)  14 (12%)  12 (11%)  12 (11%) |
| AKI status during stay in PICU   * No AKI (%) * Stage 1 AKI * Stage 2 AKI   Stage 3 AKI | 68 (58%)  16 (14%)  16 (14%)  16 (14%) |
| Renal dysfunction on admission in addition to AKI | 19 (16%) |
| Admission median creatinine, micromol/L (IQR) | 61 (37 - 90) |
| Median urine output at 24 hours - ml/kg/hr (IQR) | 1.07 (0.7 - 1.9) |
| Admission fluid bolus (%) | 74 (64%) |
| **PICU management** |  |
| Vasopressors on admission (%) | 36 (31%) |
| Inotropic agent on admission (%) | 63 (54%) |
| Nephrotoxic agent  Piptazobactam/Piperacillin (%)   * Amikacin (%) * Aciclovir/Ganciclovir (%) * Vancomycin (%) * Teicoplanin (%) * Ceftriaxone (%) * Gentamicin (%) * Anakinra (%) * NSAIDs (%) | 10 (9%)  20 (17%)  10 (9%)  6 (5%)  1 (1%)  1 (1%)  5 (4%)  1 (1%)  2 (2%) |
| Deaths in PICU (%) | 2 (1.7%) |
| Non-invasive ventilation (%) | 24 (21%) |
| Invasive mechanical ventilation (%) | 41 (35%) |
| Median duration of invasive mechanical ventilation in days (IQR) | 3 (1 - 5) |
| ECMO (%) | 3 (2.6%) |
| CRRT (%) | 3 (2.6%) |
| Median duration of PICU stay in days (IQR) | 4 (2 - 5) |

AKI - Acute Kidney Injury; BMI- Body Mass Index; CRRT- Continuous Renal Replacement Therapy; ECMO - Extra-corporeal Membrane oxygenation; NSAIDS - Non- steroidal anti-inflammatory drugs; PICU - Pediatric Intensive Care Unit; PIM3 - Paediatric Index of Mortality 3; pro-BNP - pro B-type natriuretic peptide; SARS-CoV2- Severe acute respiratory syndrome coronavirus 2