

**SUPPLEMENTARY TABLE 1** Individual patient descriptions of COVID-19 including the risk factors: renal replacement vintage, number of previous diagnoses and immunosuppression

| Case #   | Age, y; sex<br>(† deceased)<br>(A, ARDS) | COVID<br>illness<br>days | Hospital<br>days | CoV-2<br>shedding<br>days | CoV-2<br>positive<br>sample | CoV-2 IgG<br>titer \$<br>(on day) | Management (on illness days)  | Time, y on<br>total RRT<br>(KTX) | Dx, N | Immunosuppression<br>[CNI-TL ng/mL]  | Medication change (on days)                         |
|--|--|--------------------------|------------------|---------------------------|-----------------------------|-----------------------------------|---|----------------------------------|-------|--------------------------------------|---|
| <b>Kidney transplant with COVID-19 (KTX-COVID)</b>                         |  |                          |                  |                           |                             |                                   |   |                                  |       |                                      |   |
| 1  | 52; m                                    | 1                        | 0                | -                         | NP                          | pos. (60)                         | AMB   | 5.1 (5.1)                        | 9     | TAC [5-7], MPA 2 g/d, Pred 5 mg/d    | none  |
| 2  | 55; m                                    | 21                       | 0                | -                         | NP                          | 2.69 (33)                         | AMB   | 5.9 (3.8)                        | 34    | TAC [5-7], MPA 1 g/d, Pred 5 mg/d    | none  |
| 3  | 64; f                                    | 21                       | 0                | -                         | NP                          | 0.14# (40)                        | AMB   | 3.5 (2.8)                        | 31    | TAC [7-10], MPA 0.5 g/d, Pred 5 mg/d | MPA held + Pred to 10 mg/d (5-19)                   |
| 4  | 68; m (A)                                | 26                       | 57 §             | 47                        | NP                          | 5.44 (24)                         | SW oxygen (1-14), thereafter SW no oxygen. Not to ICU b/o DNI, DNR. Persistent CoV-2 RNA shedding   | 11.5 (5.4)                       | 75    | TAC [5], Pred 5 mg/d                 | TAC held + Pred to 10-15 mg/d (15-57)               |
| 5  | 62; f (†) (A)                            | 69                       | 63               | 18                        | NP, TS, ST                  | 8.34 (28)                         | SW oxygen (7-12) -> ICU NIV (8-9) -> ITN, tracheostomy / MEV (10-69), cytokine ads (12), RRT (12-69) -> death   | 14.9 (14.9)                      | 51    | TAC [5-7], MPA 1g/d, Pred 0          | MPA held (7-69), TAC held + Pred new 5 mg/d (12-69) |
| 6  | 62; f (†) (A)                            | 15                       | 15               | 15                        | NP, TS, ST                  | 2.36 (15)                         | SW oxygen (1-12) -> ICU NIV (12-13) -> ITN / MEV (12-13), ECMO (13), RRT (13) -> death  | 9.6 (8.5)                        | 31    | TAC [5-7], MPA 0.75g/d, Pred 5 mg/d  | MPA held (1-15), TAC + ARB held (14-15)             |
| 7  | 69; m (†) (A)                            | 22                       | 13               | 17                        | TS                          | -                                 | SW oxygen (10-15) -> ICU ITN / MEV (15-22), RRT (22) -> death   | 14.9 (7.8)                       | 57    | TAC [5-7], MPA 1.5 g/d, Pred 5 mg/d  | TAC held (10-22), MPA held (14-22)                  |
| <b>Hemodialysis with COVID-19 (HD-COVID)</b>                               |  |                          |                  |                           |                             |                                   |   |                                  |       |                                      |   |
| 1  | 65; m                                    | 7                        | 0                | 10                        | NP                          | 4.92 (57)                         | AMB   | 4.7                              | 21    | none                                 | none  |
| 2  | 79; f                                    | 14                       | 0                | 15                        | NP                          | 4.45 (15)                         | AMB   | 4.7                              | 34    | none                                 | none  |
| 3  | 61; f                                    | 14                       | 0                | 14                        | NP                          | 3.90 (14)                         | AMB   | 2.7                              | 26    | none                                 | none  |
| 4  | 69; m                                    | 14                       | 0                | 16                        | NP                          | 2.00 (16)                         | AMB   | 0.9                              | 34    | none                                 | none  |
| 5  | 73; m                                    | 21                       | 0                | 21                        | NP                          | 1.52 (14)                         | AMB   | 4.1                              | 27    | none                                 | none  |
| 6  | 79; f                                    | 14                       | 3                | 18                        | NP                          | -                                 | SW (9-12)   | 5.6                              | 17    | none                                 | none  |
| 7  | 38; f                                    | 20                       | 10               | 20                        | NP                          | 11.23 (20)                        | SW oxygen (10-20)   | 3.1                              | 36    | none                                 | none  |
| 8  | 73; m                                    | 14                       | 34 §             | 32                        | NP                          | 7.69 (36)                         | SW oxygen (12)  | 0.8                              | 20    | CyA [120], Pred 5 mg/d               | none  |
| 9  | 66; f (A)                                | 32                       | 44 &             | 21                        | NP, TS, BAL                 | -                                 | ICU NIV (5) -> ITN, tracheostomy / MEV (6-18) -> decanulation (18) -> downgrade, recovery -> hospitalization continued for TAVI                                     | 0.6                              | 29    | none                                 |   |
| 10   | 72; m (†) (A)                            | 9                        | 6                | 6                         | NP                          | -                                 | SW (1-2) -> AMB (3-4) -> ICU (5-9) -> death (Community hospital)  | 10.6                             | 23    | none                                 | HTN-meds reduced (4-9)                              |
| 11   | 67; f (†) (A)                            | 34                       | 34               | 34                        | TS, BAL                     | 10.83 (22)                        | SW (6-8) -> ITN MEV -> referral from Community to University hospital -> ICU, tracheostomy / MEV (9-34), cytokine adsorption (10) hemicolecotomy, MOF (33) -> death | 4.5                              | 21    | none                                 | HTN-meds held (6-34)                                |
| <b>Hemodialysis asymptomatic SARS CoV-2 RNA positive (HD-asympt CoV-2)</b> |  |                          |                  |                           |                             |                                   |   |                                  |       |                                      |   |
| 1  | 65; f                                    | 0                        | 0                | 20                        | NP                          | -                                 | AMB   | 3.3                              | 23    | none                                 | none  |
| 2  | 79; m                                    | 0                        | 0                | 21                        | NP                          | -                                 | AMB   | 6.5                              | 22    | none                                 | none  |
| 3  | 87; f                                    | 0                        | 0                | 33                        | NP                          | -                                 | AMB   | 4.5                              | 19    | none                                 | none  |

A, ARDS, acute respiratory distress syndrome; ads, adsorption; AMB, ambulatory; BAL, bronchoalveolar lavage; CNI-TL, calcineurin inhibitor trough level; CoV-2, SARS CoV-2; CyA, ciclosporin A; d, day; DNI, do not intubate; DNR, do not resuscitate; Dx, baseline diagnoses; ECMO, extracorporeal membrane oxygenation; f, female; HFRS, hospital frailty risk score; HTN-meds, antihypertensives; ICU, intensive care unit; IgG, immunoglobulin G; ITN, intubation; KTX, kidney transplant; m, male; MEV, mechanical ventilation; MPA, mycophenolic acid; MOF, multi organ failure; N, number; NIV, non-invasive ventilation; NP, nasopharyngeal swab; oxygen, nasal oxygen supplementation; pred, prednisolone; RRT, renal replacement therapy; ST, stool; SW, standard ward; TAVI, transcatheter aortic valve implantation; TS, tracheal secretion; y, years; † deceased; § prolonged viral RNA shedding led to a hospitalization time greater than duration of COVID-19 illness; & requirement for TAVI to treat aortic stenosis first diagnosed during COVID-19 led to a hospitalization time greater than duration of COVID-19 illness; # considered as serologic non-responder based on previously positive PCR, typical symptoms and immunosuppressed status  
 \$ SARS-CoV-2 Immunoglobulin G (IgG) seroconversion expressed as the ratio of extinction of the sample and the manufacturer's calibration solution (0 - <0.8: negative, 0.8 - 1.1: borderline, >1.1: elevated with a possible maximum of 11)  
 Timepoints are expressed as days from beginning of the illness/SARS CoV-2 positivity, whichever first