

Supplementary Material 1. Summary of recommendations for SARS-CoV-2 testing and organ procurement from deceased donors

1. Evaluation of deceased donors regarding SARS-CoV-2

- PPE for the organ procurement team
 - The PPE requirements for COVID-19 follow the guidelines of the institution where the organ is recovered.
- Verification of the medical history of the deceased donor
 - Obtain the donor's history of COVID-19 and any close contact with COVID-19 patients.
- SARS-CoV-2 testing of the deceased donor
 - Major national guidelines recommend obtaining respiratory specimens for SARS-CoV-2 PCR testing and obtaining specimens as close as possible to the time (within 24–48 hours) of organ procurement. In lung transplantation, lower respiratory tract testing for SARS-CoV-2 by PCR is mandatory.
- The utilization of Ct values for SARS-CoV-2 PCR in deceased donors
 - Ct values are used as an ancillary tool to determine the potential for SARS-CoV-2 transmission, but it is not recommended to use them as an absolute criterion.
- Utilization of SARS-CoV-2 antibody results in deceased donors
 - SARS-CoV-2 antibodies are not recommended as an indicator for assessing the safety or potential transmission risk to recipients.
- Utilization of chest computed tomography for COVID-19
 - Routine use of chest computed tomography in COVID-19 patients is not recommended due to inadequate sensitivity and specificity.

2. Organ procurement from a deceased donor with a positive SARS-CoV-2 PCR test

- Organ procurement and transplantation of lung and small bowel
 - It is not recommended to recover lungs and small bowels from deceased donors with COVID-19 who are presumed to have a potential for respiratory transmission (within 20 days of COVID-19 infection or after 90 days of infection).
- Organ procurement and transplantation of non-lung solid organs
 - With sufficient explanation and with recipient consent obtained, recovering organs other than the lungs or small bowel from deceased donors with COVID-19 may be considered, as the likelihood of COVID-19 transmission through these organs is deemed to be very low.

3. Organ procurement from deceased donors with a history of COVID-19 but a negative SARS-CoV-2 PCR test

- As the likelihood of COVID-19 transmission is significantly low, organ transplantation can be considered, with sufficient explanation of the theoretical possibility of SARS-CoV-2 transmission before recipient consent is obtained.

4. Organ procurement from deceased donors who tested negative for SARS-CoV-2 by PCR but had close contact with COVID-19 patients

- If a deceased donor has a history of close contact with a confirmed COVID-19 patient, but the SARS-CoV-2 PCR test is negative, the procurement of non-pulmonary organs can be considered because the possibility of transmission through non-pulmonary organs is presumed to be very low or negligible. However, there is a theoretical possibility of transmitting the virus through the lung. Therefore, a case-by-case evaluation and plan are necessary for lung transplantation.

SARS-CoV-2, severe acute respiratory syndrome coronavirus 2; PPE, personal protective equipment; COVID-19, coronavirus disease 2019; PCR, polymerase chain reaction; Ct, cycle threshold.