

COVID-19 recommendation

Update, 2022-02-14

1. SARS-CoV-2 testing of potential deceased solid organ donors (incl. Langerhans islets)

SARS-CoV-2 PCR diagnostics must be carried out in all potential deceased organ donors using an oro/nasopharyngeal swab or a deep respiratory tract sample. In case of lung donation, analysis of a deep respiratory tract sample is mandatory. The medical advisor of Swisstransplant can request an additional chest CT-scan for further evaluation of potential COVID-19. SARS-CoV-2 PCR testing must be performed less than 72 hours before organ donation. If the time window exceeds 72 hours, the test has to be repeated.

2. Deceased solid organ donors (incl. Langerhans islets) without active COVID-19

Organs of deceased organ donors without evidence for an active SARS-Cov-2 infection can be allocated as usual.

3. Deceased solid organ donors (incl. Langerhans islets) with PCR-confirmed SARS-CoV-2 infection

If the SARS-CoV-2 PCR is positive or if the chest CT-scan is highly suspicious for COVID-19, lungs cannot be allocated.

Potential deceased organ donors with active COVID-19 (positive PCR from oro-or nasopharyngeal swab) and suffering from a mild/asymptomatic disease are eligible on a regular basis only for liver donation in a live saving situation for a recipient on a national urgent status.

In selected cases, potential deceased organ donors with asymptomatic disease might be eligible for non-urgent liver, kidney, heart and pancreas/islets donation after careful interdisciplinary evaluation. All cases should be individually assessed and following aspects have to be taken into account when evaluating such potential donors:

- Interval between previous COVID-19 and SARS-CoV-2 NAT: SARS-CoV-2 NAT may remain positive for a prolonged period after resolved COVID-19. Therefore, assessing the interval between a previous SARS-CoV-2 infection and the present SARS-CoV-2 NAT is crucial. If the patient has a recent history of an asymptomatic SARS-CoV-2 infection, the positive SARS-CoV-2 NAT may reflect remnants of a resolved recent infection. This may be particularly true if cycle threshold (ct) values of the SARS-CoV-2 PCR are high (ct value >30).
- Urgency of transplantation: In case of urgent transplantations, the risk of an impaired COVID-19 course due to post-transplant immunosuppression has to be weighed up against the consequences

of not proceeding with the transplantation. In addition, risk factors for an unfavorable COVID-19 outcome, which are not directly related to the transplant procedure have to be taken into account when making the decision.

- Vaccination history and SARS-CoV-2 serostatus of the potential recipient: If possible, we encourage evaluating the serostatus of potential solid organ recipients. Potential recipients with detectable anti-spike antibodies reflecting either a vaccine elicited immune response or a previous infection, may be at least partially protected from a severe course of disease.

The future recipient or his/her next of kin has to be informed about the risks and benefits of accepting an organ from a donor with COVID-19 and has to provide written consent. The consent has to be attached in the SOAS prior to transplantation. A preemptive therapy with a monoclonal antibody may be considered and should be discussed in the interdisciplinary team on a case-by-case basis.

4. Living solid organ donors SARS-CoV-2

PCR diagnostics must be carried out in all living donors to exclude the possibility of COVID-19 using an oro-or nasopharyngeal swab. The PCR testing has to be performed less than 72 hours before donation. If the time window exceeds 72 hours, the test has to be repeated. Detailed medical history, including prior SARS-CoV-2 vaccination, available SARS-CoV-2 serology titers, exposure to persons with COVID-19 and searching for COVID-specific symptoms is mandatory prior to donation and has to be documented. Living donors with active COVID-19 are not eligible for donation. Living donors who have recovered from confirmed COVID-19 may donate organs at least 14 days after laboratory evidence for viral RNA clearance (by SARS-CoV-2 PCR from oro-or nasopharyngeal swabs) and at least 28 days after symptom resolution.

5. Cornea donation

Potential cornea donors must be screened by a SARS-CoV-2 PCR on an oro-or nasopharyngeal swab performed, less than 72 hours pre-mortem or not more than 24 hours post-mortem. Patients with active COVID-19 are not eligible for cornea donation. COVID-19 negative patients exposed to SARS-CoV-2 may donate cornea if the last exposure with a confirmed COVID-19 case was more than 14 days before donation. Patients who have recovered from confirmed COVID-19 may donate cornea at least 14 days after laboratory evidence for viral RNA clearance (by SARS-CoV-2 PCR from oro-or nasopharyngeal swabs) and at least 28 days after symptom resolution.

6. Donation of tissues other than cornea

- a. In case of amniotic membrane donation for transplantation in human eye we recommend PCR diagnostics in the respiratory tract of the tissue donor using an oro-or nasopharyngeal swab not earlier than 24 hours before donation and no later than 24 hours after donation. Detailed medical history, exposure to COVID-19 infected persons and searching for COVID-specific symptoms is mandatory prior to donation and has to be documented.
- b. In case of bone graft donation from asymptomatic donors we do not recommend routine PCR diagnostics. Detailed medical history, exposure to COVID-19 infected persons and searching for COVID-specific symptoms is mandatory prior to donation and has to be documented.