

MEMORANDUM

SARS-CoV-2 Positive Transplant Candidates, 22th December 2021

Potential recipients of a solid organ transplant may test positive for SARS-CoV-2 by routine nucleic acid tests (NAT) immediately prior to transplantation. Asymptomatic transplant candidates should not be automatically excluded, but carefully assessed, as a positive SARS-CoV-2 NAT may not necessarily require excluding them from transplantation.

We strongly suggest considering all following aspects when evaluating a potential solid organ transplant recipient tested positive for SARS-CoV-2 by NAT from respiratory/saliva samples:

- 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.
- 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 COVID-19, 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 >35). If this is the case, a transplant might remain possible with a limited risk of complications.
- SARS-CoV-2 serostatus of the potential recipient: If possible, we encourage evaluating the serostatus of potential solid organ recipients with a positive SARS-CoV-2 NAT result. 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. This is particularly important in recipients without a COVID-19 history, showing a positive NAT test without symptoms, as this could allow to help to distinguish between a resolved or very early infection. A resolved infection, suggested by positive anti-spike antibodies, might allow a transplantation with a limited risk of complications.

- Administration of monoclonal SARS-CoV-2 antibodies: Therapeutic SARS-CoV-2 monoclonal antibody compounds are in clinical use and commercially available. These compounds are administered to asymptomatic / mildly symptomatic patients with risk factors for a severe course of disease or to hospital admitted COVID-19 patients with non-detectable anti-spike antibodies. Even though not licensed for this indication, we suggest considering treating preemptively asymptomatic SOT recipients who were transplanted despite having a positive SARS-CoV-2 NAT with monoclonal antibodies. Due to dilution effects caused by blood loss during transplant surgery, we recommend to consider administering these compounds after the transplant surgery.