

Testing for coronavirus (SARS-CoV-2) causing COVID-19: Information for donation and transplant professionals - 2024 update

Preamble

Knowledge about COVID-19 has evolved rapidly since 2020 with advice and publications regarding the disease continually being updated. The guidance in this document aims to provide an update that reflects this evolving field with regard to community prevalence of viral infection, donor viral testing requirement, and recipient testing recommendations.

Clinicians within the organ donation and transplantation sector should ensure that the information utilised is in its most up to date form. This information should be read in conjunction with the [Coronavirus \(COVID-19\) – CDNA National Guidelines for Public Health Units | Australian Government Department of Health and Aged Care](#) CDNA-SoNG. Further links to national guidance are provided within and at the end of this document.

SARS-CoV-2 has not been transmitted through transplantation of organs other than lung. Allograft outcomes appear equivalent for non-lung organs from SARS-CoV-2 PCR positive versus negative donors.^{1,2} Reasonable outcomes have been reported for lung transplantation from SARS-CoV-2 PCR positive donors in small cohort studies, with limited granular data regarding donor infection or recipient management.³⁻⁵ Outcomes are expected to be better where COVID-19 has not significantly involved the lungs, where infection is in later stages (e.g. weak PCR results), where the recipient is immune from vaccination/prior infection and otherwise has a good, predicted outcome from lung transplantation.

1. Routine testing of deceased donors

Routine COVID-19 (SARS-CoV-2) virus testing need only be undertaken in lung donors and should include lower respiratory tract PCR.

2. Suggested approach to assessing suitability of donors with COVID-19 (SARS-CoV-2) PCR positive

Donation can proceed from non-lung donors with positive SARS-CoV-2 PCR provided the transplanting organ has not been damaged by the infection. Lung transplantation from SARS-CoV-2 PCR positive donor can be considered on a case-by-case basis with recipient informed consent.

3. Routine testing of living donors and recipients prior to transplantation

SARS-CoV-2 testing can be considered on clinical grounds but is not routinely required in asymptomatic individuals.

Information sources

- Organ Procurement and Transplantation Network. Summary of current evidence and information-donor SARS-CoV-2 testing and organ recovery from donors with a history of COVID-19. [COVID-19 - OPTN \(hrsa.gov\)](#)
- [Transplants | COVID-19 Treatment Guidelines \(nih.gov\)](#). February 2024
- [sars-cov-2-summary-of-evidence.pdf \(hrsa.gov\)](#). February 2024

References

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3. Asija R, Singh R, Paneitz DC, Wolfe SB, Chukwudi C, Michel E, Rabi SA, Langer NB, Osho AA, Ganapathi AM. Is Transplantation With Coronavirus Disease 2019-Positive Donor Lungs Safe? A US Nationwide Analysis. *Ann Thorac Surg*. 2023 Nov;116(5):1046-1054.
4. Hwang J, Yuen A, Rhoades J, Barnes D, Zakowski P, Megna DJ, Catarino P, Zaffiri L, Rampolla R. Real-time transcription polymerase chain reaction cycle threshold values as criteria for utilization of incidental COVID-19 positive lung donors. *J Heart Lung Transplant*. 2023 Mar;42(3):301-304.
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