

**COVID-19 vaccination in solid organ transplant candidates and solid organ transplant recipients
(Berne, 31.01.2021)**

Several COVID-19 vaccines have received or are close to achieve Swissmedic approval. In Switzerland, the first available vaccines will be mRNA based vaccines (Moderna, Pfizer/BioNTech). These vaccines are administered in a two-dose regimen. Current data for mRNA vaccines show efficacy of >90%. The most common adverse reactions of these vaccines are injection site pain (~90%), fatigue (~70%) and headache (~60%). Serious adverse events are rare (~1%). Solid organ transplant recipients were excluded from vaccine trials and thus efficacy in this population is unknown. Based on previous experience with other vaccines, immunogenicity could potentially be reduced compared to immunocompetent patients. Data on safety in solid organ transplant recipients is unavailable. However, in previous vaccine studies increased rates of rejection have not been substantiated in general. Whether this also holds true for mRNA vaccines is currently unknown.

Given the potential severity of COVID-19 in solid organ transplant recipients, we believe that the potential benefit of COVID-19 vaccination in this population outweighs concerns for potential lack of safety. We encourage immunization of patients awaiting solid organ transplantation and of solid organ transplant recipients.

In the post transplantation setting, the ideal timing of vaccination is uncertain. We recommend delaying vaccination at least one month from transplant surgery and 3 months from use of T-cell or B-cell depleting agents; primarily for reasons of expected reduced efficacy and less for safety concerns. In the pre transplant setting, we recommend vaccination for all patients on the waiting list, including patients who are already on immunosuppressive treatment for other reasons (in accordance with the recommendation of the *Eidgenössische Kommission für Impffragen, EKIF*, see FOPH website for recommendation <https://www.bag.admin.ch/bag/de/home/krankheiten/ausbrueche-epidemien-pandemien/aktuelle-ausbrueche-epidemien/novel-cov/information-fuer-die-aerzteschaft/covid-19-impfung.html>). In case of urgent listing of severely ill patients (e.g. acute liver failure) the decision for or against vaccination should be taken on an individual case basis.

Recommendation approved by Dr Cédric Hirzel, President Swisstransplant Working Group of Infectious Diseases, Prof Christoph Berger, President Federal Commission on Vaccination, and PD Franz Immer, Medical Director and CEO Swisstransplant

Reference:

https://ishlt.org/ishlt/media/documents/SARS-CoV-2_Guidance-for-Cardiothoracic-Transplant-and-VADcenter.pdf