

## **COVID-19 vaccination in solid organ transplant candidates and solid organ transplant recipients – an update (Bern, 09.10.2023)**

In Switzerland, the majority of the population (>98%) had detectable anti-SARS-CoV-2 antibodies as by June/July 2022 (1). Despite the high seroprevalence, patients with immunodeficiencies might not be sufficiently protected against severe COVID-19 courses.

We therefore advise to follow the recommendations published by the Federal Office of Public Health and the «Eidgenössischen Kommission für Impffragen, EKIF» (2) and administer a COVID-19 vaccine booster dose to all patients on the waiting list for solid organ transplantation (SOT) and to all transplanted patients. The vaccine should ideally be administered between mid-October and December 2023.

If available, an XBB.1.5 variant adapted vaccine should be preferably used. Alternatively, bivalent (Original/Omicron BA.4-5 or Original/Omicron BA.1) mRNA vaccines can be administered. For patients, who wish not to be vaccinated with an mRNA vaccine, a protein vaccine (Nuvaxovid®) is available in Switzerland.

If transplanted patients or SOT candidates on the waiting list have not been previously vaccinated against COVID-19, we advise to follow the algorithm published by the Federal Office of Public Health and the "Eidgenössischen Kommission für Impffragen, EKIF" and to measure SARS-CoV-2 anti-spike antibodies in serum using a commercially available serologic assay (3). If the serology (SARS-CoV-2 anti-spike antibodies) is positive, a single COVID-19 vaccine dose as described above is appropriate. In case of negative or indeterminate results of the serologic assay, a basic immunization with 3 doses of an XBB.1.5 adapted mRNA vaccine, with a minimal interval of 4 weeks between doses, followed by a booster dose (not earlier than 6 months after the last vaccine dose) should be administered.

In case of SARS-CoV-2 infection, we encourage to evaluate SOT recipients and SOT candidates for treatment with a direct antiviral agent or with monoclonal antibodies (monoclonal antibodies only if compounds with sufficient neutralizing activity against currently circulating SARS-CoV-2 variants are available).

Recommendation approved by the STAI Swisstransplant Working Group of Infectious Diseases | PD Dr. Cédric Hirzel, President; Dr. Katia Boggian; Prof. Nicolas Müller; Prof. Nina Khanna; Prof. Oriol Manuel; Prof. Christian van Delde; and PD Dr. Franz Immer, Medical Director and CEO Swisstransplant

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