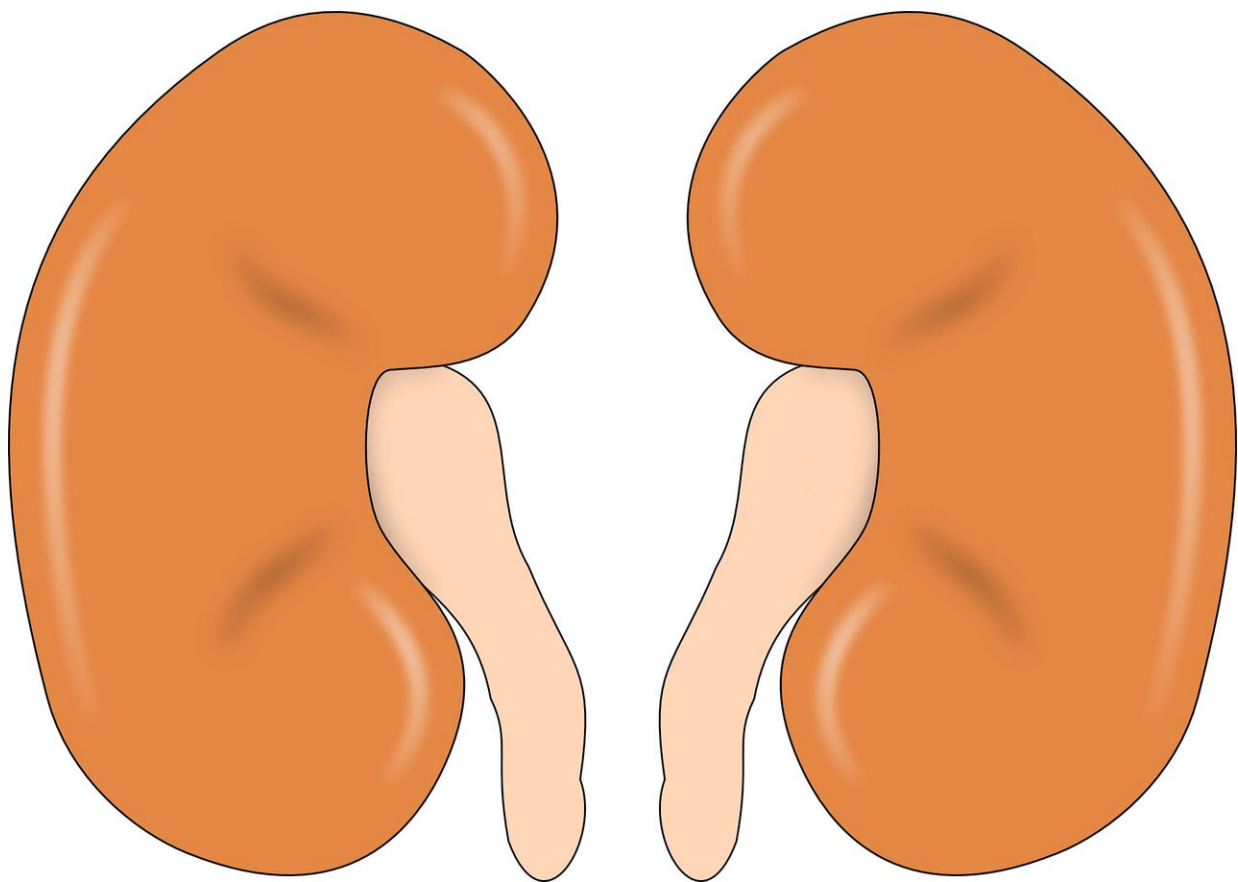


# Immune responses after COVID-19 vaccination in kidney transplant and dialysis patients

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A new study reveals the extent to which kidney transplant recipients and

individuals with kidney failure who are on dialysis mount immune responses—which include the production of antibodies and the activation of T cells—to COVID-19 vaccination. The findings are published in *JASN*.

Data are scarce on whether [kidney](#) transplant recipients and individuals on dialysis receive sufficient protection from COVID-19 vaccines. To investigate, Dominique Bertrand, MD (Rouen University Hospital, in France) and his colleagues examined immune responses after vaccination with the Pfizer-BioNTech COVID-19 mRNA vaccine in 45 kidney transplant recipients and 10 patients undergoing chronic hemodialysis.

After the second vaccine dose, 88.9% of patient on dialysis and only 17.8% of kidney transplant recipients developed antibodies against the virus that causes COVID-19. A specific T-cell response against the virus was evident in 100% of patients on dialysis and 57.8% of kidney transplant recipients. The [immune response](#) seemed to be influenced by the [immunosuppressive drugs](#) that kidney transplant recipients took, with some drugs having a greater effect than others.

"The vaccine seems efficient in individuals undergoing dialysis, indicating that vaccination should be highly recommended in these patients," said Dr. Bertrand. "By contrast, the low antibody response observed in kidney transplant recipients is worrying; however, antibodies are not the full spectrum of protection induced by the vaccine. T cell immunity is probably also very important."

The findings may be useful for developing an effective strategy of vaccination for kidney transplant recipients.

**More information:** "Antibody and T Cell response to SARS-CoV-2 Messenger RNA BNT162b2 Vaccine in Kidney Transplant Recipients

and Hemodialysis Patients," *JASN*, [DOI: 10.1681/ASN.2021040480](https://doi.org/10.1681/ASN.2021040480)

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