

# Hemodialysis patients have antibody response to COVID-19 vaccine

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Most hemodialysis patients (HDP) but few kidney transplant recipients

(KTRs) develop antibody responses to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) after receipt of an mRNA vaccine, according to a study published online June 10 in the *Journal of the American Society of Nephrology*.

Dominique Bertrand, M.D., from Rouen University Hospital in France, and colleagues explored postvaccinal humoral and [cellular response](#) in 45 KTRs and 10 HDPs who received two injections of mRNA BNT162b2 vaccine between Jan. 18 and Feb. 24, 2021.

The researchers found that 88.9 percent of HDPs and 17.8 percent of KTRs developed anti-spike SARS-CoV-2 antibodies after the second dose. In responders, the median titers of antibodies were 1,052 and 671 AU/mL in HDPs and KTRs, respectively. Overall, 100 and 57.8 percent of HDPs and KTRs, respectively, showed a specific T-cell response after the second vaccination. The median numbers of spike-reactive T cells were 305 and 212 spot-forming cells per  $10^6$  CD3+ T cells in HDPs and KTRs, respectively. The [immune response](#) to BNT162b2 seemed to be influenced by the immunosuppressive regimen in KTRs, especially tacrolimus or belatacept.

"The vaccine seems efficient in individuals undergoing dialysis, indicating that vaccination should be highly recommended in these patients," Bertrand said in a statement. "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."

**More information:** [Abstract/Full Text \(subscription or payment may be required\)](#)

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