

# Those suffering from autoimmune diseases require a third coronavirus vaccination

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Many patients suffering from an autoimmune disease such as rheumatism, ulcerative colitis or psoriasis must take medicine that affects their immune system. As the immune system also determines the effectiveness of vaccinations, some of those suffering from autoimmune diseases wonder whether it is safe for them to be vaccinated against SARS-CoV-2 without incurring any complications as a direct result of

the vaccine, and whether the vaccine will be just as effective and offer them protection for the same period as time as healthy people.

A large study at the Deutsches Zentrum für Immuntherapie (DZI) at Universitätsklinikum Erlangen has looked at this important issue in detail. The results have recently been published in the journal *The Lancet Rheumatology*.

In the prospective study, the interdisciplinary research team from DZI investigated a total of more than 3,700 patients and healthy participants who have received either two or three vaccines against coronavirus. The results allay the fears of those suffering from [autoimmune diseases](#). Most of those who had the vaccination did not report any significant side effects, with no difference between the healthy participants and those suffering from autoimmune diseases. In addition, the majority of patients created [antibodies](#) to protect them against coronavirus. Another interesting and very important result is that generally speaking, people with autoimmune diseases generally have a weaker immune response after two vaccinations against coronavirus, and their vaccine protection generally wanes faster in comparison to the control group.

"Age and certain treatments can lead to the immune response in patients with autoimmune diseases waning faster than in others," emphasizes Dr. David Simon from Department of Medicine 3—Rheumatology and Immunology from Universitätsklinikum Erlangen, who led the study. Specifically, the study determined that "older patients lose their immune protection after the [coronavirus vaccine](#) faster than younger patients."

His colleague Dr. Koray Tascilar continues, "Some medications that aim specifically at certain immune cells such as T and B cells seem to reduce the effectiveness of the short and long-term immune response. It is therefore probable that this group in particular would benefit from a third vaccination soon after the second."

The study also indicated that the immune protection increased considerably in patients with autoimmune diseases who had a booster vaccination.

"Individual booster vaccinations definitely make sense," concludes Prof. Schett. "Adjusting vaccination schedules and offering an earlier [booster](#) vaccination may provide those suffering from autoimmune diseases with better protection."

**More information:** David Simon et al, Intensity and longevity of SARS-CoV-2 vaccination response in patients with immune-mediated inflammatory disease: a prospective cohort study, *The Lancet Rheumatology* (2022). [DOI: 10.1016/S2665-9913\(22\)00191-6](https://doi.org/10.1016/S2665-9913(22)00191-6)

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