

# Longer interval between COVID-19 vaccines generates up to nine times as many antibodies

April 22 2022

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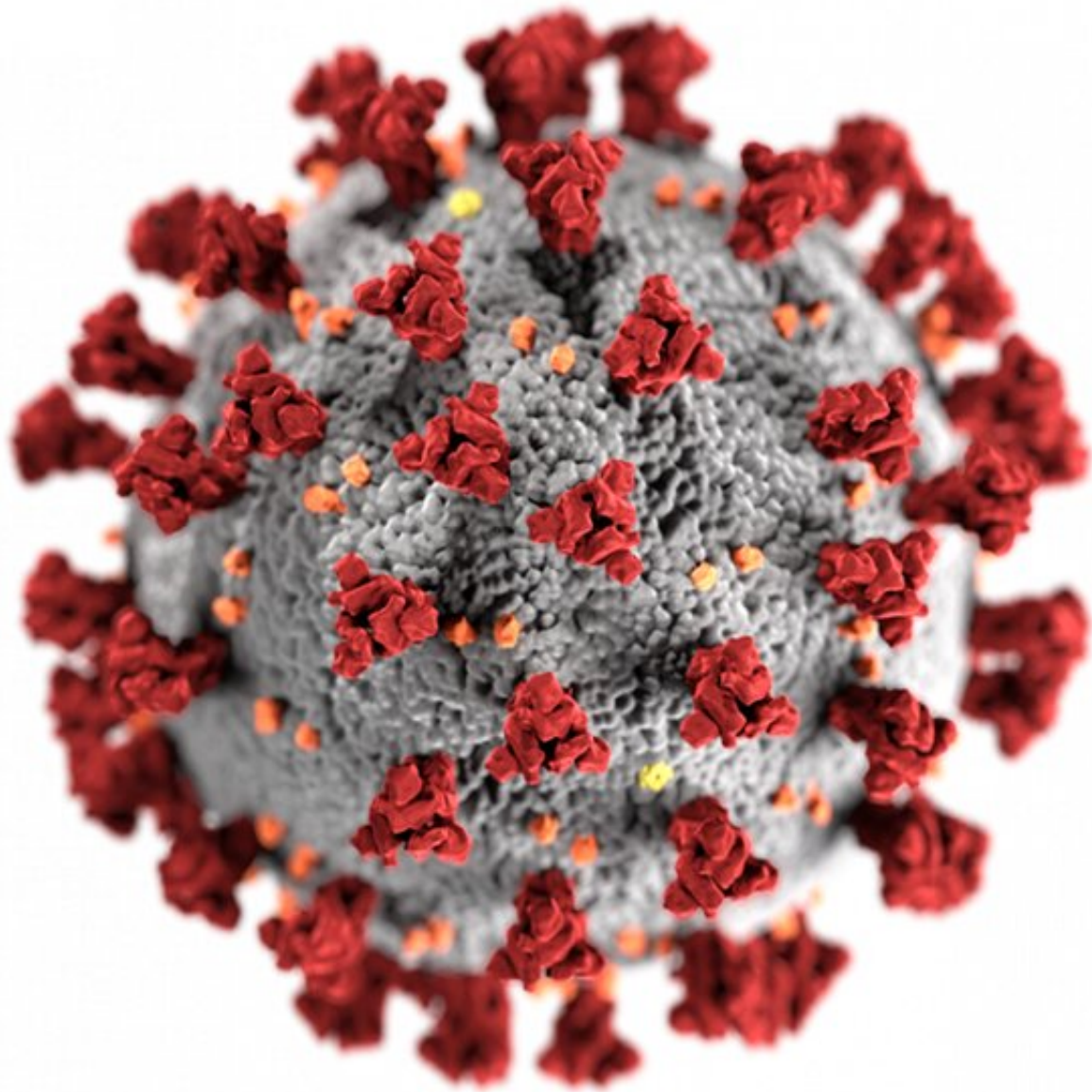


Image of the ultrastructural morphology exhibited by the 2019 Novel Coronavirus (2019-nCoV). Credit: CDC

New research to be presented at this year's European Congress of Clinical Microbiology & Infectious Diseases (ECCMID) in Lisbon, Portugal, (23-26 April), has shown that a longer interval between primary COVID-19 vaccine doses can boost antibody production up to nine-fold. The study is available as a preprint.

Understanding the [immune response](#) to vaccination against COVID-19 is integral to controlling the virus and reducing the number of deaths.

To find out factors affecting [antibody responses](#) following Pfizer/BioNTech COVID vaccination, Dr. Ashley Otter and colleagues at the UK Health Security Agency (UKHSA) measured [antibody levels](#) in [blood samples](#) taken from almost 6,000 [healthcare workers](#) from across the UK enrolled within the UK's SIREN study (SARS-CoV-2 Infection and Reinfection and EvaluationN).

3,989 of the 5,871 participants had their first dose of the vaccine at least 21 days earlier. 1,882 had their second dose at least 14 days earlier. The participants were classified by infection history as either previously having had COVID (confirmed by a PCR test or assumed due to their antibody profile) or naïve, with no history of infection. Almost all (>99%) of those who hadn't had COVID seroconverted after vaccination, meaning they made antibodies against the virus.

Post-dose 1, those with previous infection had up to ten times higher antibody levels than naïve individuals, whilst after dose 2, those with previous infection had antibody levels more than twice as high as those who hadn't had previous infection.

When analyzing dosing intervals, it was found that longer dosing interval was associated with up antibody levels that were up to nine times higher in naïve participants (>2 and 10 weeks 11,479.73 (10,742.78-12,267.24), p=

Citation: Longer interval between COVID-19 vaccines generates up to nine times as many antibodies (2022, April 22) retrieved 21 July 2023 from <https://medicalxpress.com/news/2022-04-longer-interval-covid-vaccines-antibodies.html>

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