Pfizer vaccine less effective against South African variant, study finds

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Ben-Gurion University of the Negev (BGU) researchers have found that the Pfizer Coronavirus vaccine is moderately less effective against the South African variant, but still neutralizes the British variant and the original SARS-CoV-2 strain.

Their research was just published in the prestigious journal *Cell Host and Microbe*.

"Our findings show that future variants could necessitate a modified vaccine as the virus mutates to increase its infectivity," says principal investigator Dr. Ran Taube of the Shraga Segal Department of Microbiology, Immunology and Genetics in the Faculty of Health Sciences.

The BGU scientists evaluated the vaccine effectiveness against the original viral strain, the British and the South African variants, as well as strains that harbor combined changes in the viral spike.

Dr. Taube and his team also evaluated neutralizing antibody levels following administration of one and two vaccine doses. They found that vaccination provided optimal protection when compared with the levels observed in recovered patients. The researchers are continuing to test other circulating variants as they emerge, consisting of mutations that could possibly compromise the vaccine.

More information: Alona Kuzmina et al, SARS CoV-2 spike variants exhibit differential infectivity and neutralization resistance to convalescent or post-vaccination sera, *Cell Host & Microbe* (2021). DOI: 10.1016/j.chom.2021.03.008

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