BNT162b2 still effective, but less so, against Omicron

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(HealthDay)—The effectiveness of two doses of BNT162b2 was

maintained, albeit at a reduced level, during an omicron variant proxy period in South Africa, according to a letter to the editor published online Dec. 29 in the *New England Journal of Medicine*.

Shirley Collie, from Discovery Health in Johannesburg, South Africa, and colleagues examined the vaccine effectiveness of two doses of the BNT162b2 vaccine against COVID-19 caused by the omicron variant. Vaccine effectiveness was compared during the period from Nov. 15 to Dec. 7, 2021, in South Africa (omicron proxy period) relative to Sept. 1 to Oct. 30, 2021, when the delta variant was dominant (comparator period).

A total of 133,437 polymerase chain reaction (PCR) test results were obtained during the comparator period and 78,173 PCR test results were included for the proxy omicron period (28.6 and 41.4 percent obtained at least 14 days after the second vaccine dose, respectively). The researchers found that the overall PCR test positivity was 6.4 percent during the comparator period and 24.4 percent during the proxy omicron period. As a percentage of positive PCR results, the COVID-19 admission rate was 10.8 and 2.2 percent during the comparator period and proxy omicron period, respectively. Vaccine effectiveness was 70 percent during the proxy omicron period, which was significantly lower than during the comparator period (93 percent effectiveness against hospitalization for COVID-19).

"The addition of a booster dose of vaccine may mitigate this reduction in vaccine effectiveness," the authors write

One author disclosed financial ties to Discovery Health.

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