

WORLD

Single Pfizer Vaccine Dose Shown to Be 85% Effective

A single shot of the Pfizer-BioNTech vaccine is 85% effective in preventing symptomatic disease 15 to 28 days after being administered, an Israeli study found, a development that could help in setting vaccine priorities world-wide.



By Dov Lieber

TEL AVIV—A single shot of the Covid-19 vaccine developed by Pfizer Inc. and BioNTech SE is 85% effective in preventing symptomatic disease 15 to 28 days after being administered, an Israeli study found, a development that could help guide policy makers setting vaccine priorities world-wide.

Some governments are debating whether to delay the second shot of the recommended two-dose regimen to make the most of the short supply of vaccines.

The Israeli study, conducted by the government-owned Sheba Medical Center and

released Friday, also found a 75% reduction in all Covid-19 infections, symptomatic or asymptomatic, after the first shot. The peer-reviewed study was published in the British medical journal Lancet as a correspondence, meaning it represents the views of the authors and not the journal.

The data used was collected on the center's 9,109 healthcare employees, who began their vaccination process starting on Dec. 19.

"This is the first study assessing effectiveness of a single vaccine dose in real-life conditions and shows early effectiveness, even before the second dose was administered," said Prof. Eyal Leshem, director of Sheba's Center for Travel Medicine and Tropical Diseases and one of the authors of the study.

Pfizer's Vaccine Symptomatic Cases Dropped 94% With Pfizer Vaccine, Data Show (Feb. 15)

How Pfizer Delivered a Covid Vaccine in Record Time (Dec. 11)

The results of the study may differ from others because the subjects were largely younger and healthier, said Prof. Gili Regev-Yochay, another of the authors. She also said the study couldn't confirm how long protection from one shot would last, as most of the subjects received a second shot.

Pfizer's original clinical study showed 52.4% effectiveness after one shot, but it didn't differentiate between before and after two weeks. That original study focused on a two-dose regime and found 95% efficacy a week after the second shot, results similar to those of two large Israeli studies in recent days using real-world data. The Sheba study shows just one dose could reach close to that level of efficacy.

A table published in an online annex to the Sheba study showed 94% effectiveness in preventing symptomatic Covid-19, 22 to 28 days after the first shot. This result was similar to those from two previous analyses of the Pfizer vaccine that used clinical data submitted to the U.S. Food and Drug Administration.

Canadian researchers published a letter this week in the New England Journal of Medicine saying their analysis of the data submitted to the FDA found the vaccine was 92.6% effective two weeks after the first shot. Pfizer responded in the journal that alternative dosing schedules "have not been evaluated," and that changing them is a matter for health authorities, who should monitor whether the changes to ensure the vaccines provide maximum protection.

An analysis of Pfizer’s clinical data published in December by Public Health England, part of the U.K.’s Department of Health and Social Care, found the vaccine was 89% to 91% effective 15 to 28 days after the first dose.

The authors of the Sheba study said their research bolstered the policy of countries like the U.K., which is delaying the second dose to provide the vaccine to as many people as possible.

“This groundbreaking research supports the British government’s decision to begin inoculating its citizens with a single dose of the vaccine,” said Prof. Arnon Afek, Sheba’s deputy director general.

Israel leads the world in percentage of population vaccinated. Since it began its program Dec. 20, the country has administered the first shot to about 45% of its roughly nine million people and two shots about 30%, according the health ministry.

Israel aims to inoculate most of its population by March, a goal made possible after it paid a premium for early shipments from Pfizer and agreed to share data about its vaccine—from effectiveness to side effects. The country also placed orders with other vaccine companies, including Moderna Inc. and AstraZeneca PLC.

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