

THE WALL STREET JOURNAL.

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BioNTech CEO Not Sure About Third Vaccine Dose

Governments must decide whether to give vulnerable people an extra vaccine dose, the head of the German company behind the Pfizer vaccine said.

By Bojan Pancevski

BERLIN—Immunity against the coronavirus is waning in people who were fully vaccinated with the shot made by BioNTech SE and Pfizer Inc. in January because of the rapidly spreading Delta variant, BioNTech's chief executive said, confirming data that emerged from Israel last week.

But even as antibody levels are dropping seven months after immunization among some vaccine recipients, most of them will remain protected against severe disease and might not yet need a third dose, according to Ugur Sahin, CEO of the German company that invented the vaccine and partnered with Pfizer to develop the product for the global market.

“The antibody titers are going down,” Dr. Sahin said, referring to the unit of measurement for antibodies against the virus. “The vaccine protection against the new variant is considerably lower.”

Dr. Sahin made the comments after preliminary data emerged from Israel showing that people who had received the shot in January were three times more likely to get infected than those who were vaccinated in May.

U.S. Centers for Disease Control and Prevention Director Dr. Rochelle Walensky said at a White House briefing on Thursday that vaccines offer a high degree of protection against infection, serious illness and death from the Delta variant.

Governments would now need to decide whether they want to administer a third shot to boost immunity, or whether to allow controlled infection to progress among people who had been vaccinated, in the knowledge that they likely wouldn't experience life-threatening symptoms, Dr. Sahin said.

The BioNTech-Pfizer vaccine, based on what is known as messenger RNA technology, generates twofold immunity against the coronavirus: protection against infection, which is provided by antibodies, and protection at a cellular level, where so-called memory cells are trained to identify the virus-defense mechanisms that destroy the pathogen any time it enters the body.

The weakening of the first line of defense—the antibodies—meant that vaccinated people could get infected again, but there was no evidence that their cellular immunity was dropping, since most infections wouldn't end in severe disease, Dr. Sahin said.

Small-sample, preliminary data published by Israel's Health Ministry last week showed that after two shots the vaccine was 39% effective at reducing the risk of infection and 40% effective at reducing the risk of symptomatic disease during a period when the Delta variant accounted for the majority of cases. The vaccine was 91% effective at preventing severe illness in the same period between June 20 and July 17, the ministry said.

Israel already started offering a third dose to immunocompromised individuals this month, and government experts are studying whether one is necessary for the wider population.

Unlike Pfizer, which advocates for a third dose, Dr. Sahin said that he wouldn't be giving public advice on whether to use a third shot, known as a booster, and that he would only interpret data as they arrive from real-life studies such as the one in Israel.

“This debate must proceed without us: We will only supply data and governments will need to tell us what they want,” he said.

Dr. Sahin said that in the ideal case the vaccine, which is currently only sold to governments, would be authorized for broad use and become available on the market for private purchases. At present, the shot has only been authorized for emergency use in the West, meaning that governments must decide whether to make a third shot available to their citizens.

“When the vaccine becomes available on the free market everyone will be able to make this decision for themselves,” Dr. Sahin said.

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