

- Vaccination / Virus

Vaccine efficacy v. Omicron – what we know

The Jerusalem Post · 2 Dec 2021 · 4 · EXPLAINER · By ROSSELLA TERCATIN Reuters contributed to this report.

Since the coronavirus Omicron variant was first revealed to the world last Thursday, the question that everyone has been asking is whether vaccines are effective against it.

Omicron has been described by experts as the most mutated variant so far with over 30 mutations, including a relevant number in the spike protein – the part that the virus uses to attack human cells as well as the element on which current vaccines focus.

Vaccine efficacy can be examined in two ways: through checks in the laboratory to see if antibodies found in the blood of vaccinated individuals inhibit the variant, or by collecting data from the field about how many vaccinated individuals got infected or developed serious symptoms.

According to the first estimates by medical experts and pharmaceutical companies, it would take about two weeks to have some information on the vaccine's ability to protect against Omicron.

On Tuesday, however, some remarks by Health Minister Nitzan Horowitz and preliminary data reported by a major TV channel offered some first – and encouraging – answers to the question.

Here is what we know so far.

WHAT OFFICIALS IN ISRAEL HAVE SAID:

On Tuesday morning, head of Public Health Services Dr. Sharon Alroy-Preis told the Knesset Law and Constitution Committee that the first data about the efficacy of the corona vaccines against Omicron were expected to be shared with Israel by South Africa during the day.

A few hours later, Horowitz spoke about the subject during a visit at the Soroka-University Medical Center in Beersheba.

“In the coming days we will have more accurate information about the efficacy of the vaccine against Omicron, but there is already room for optimism, and there are initial indications that those who are vaccinated with a vaccine still valid or with a booster will also be protected from this variant,” Horowitz noted.

On Wednesday morning, Coronavirus Commissioner Prof. Salman Zarka addressed the topic in an interview on 103FM Radio.

“The information we have from South Africa is that among those hospitalized due to the new variant, there are relatively more young people and less older people, so we do not know about the risk for the elderly,” he said.

“Among those hospitalized, some are vaccinated and some aren't, and those who are were probably vaccinated with [the] Johnson & Johnson [vaccine], whose efficacy is lower compared to Pfizer.”

Israel has been almost exclusively vaccinating its population with the Pfizer vaccine.

“The question of whether Omicron bypasses vaccines worries us,” Zarka said. “There is probably preliminary information that says that it may be less effective against the new strain than against the Delta variant. But I want to hope that it means it is only 80% effective – we are not talking about a choice between zero effectiveness and 100% effectiveness.”

Also on Wednesday morning, a ministry spokesperson said no information on vaccine efficacy had yet been received from South Africa, in spite of the data reported by Israeli Channel 12 on the previous night.

Later in the day, Alroy-Preis said that once there is clear data on the effectiveness of vaccines against the new strain, they will be made public.

“The Health Ministry simply tells the truth and what we know in general – and also in the current situation with the new variant,” she said speaking to the Hebrew website Ynet.

WHAT HAS BEEN REPORTED ON TV:

On Tuesday night, Channel 12 – one of the main Israeli television channels – opened its 8 o'clock news with what they described as the first data about vaccine efficacy against Omicron shared with Israel and other coun-

tries by South Africa.

According to the report, for people inoculated three times, the Pfizer vaccine is just slightly less effective in preventing infection with Omicron than with Delta – 90% as opposed to 95% – while it is just as effective in preventing serious symptoms. Different studies have described the Pfizer vaccine as 93%–95% effective against Delta.

According to the report, the ability of the variant to infect is indeed higher than Delta – around 1.3 times higher. At the same time, those not inoculated have a 2.4 times greater chance of developing serious symptoms, a significant figure.

As of Wednesday afternoon, no other international media outlet appeared to have reported the data independently.

WHAT PHARMACEUTICAL COMPANIES HAVE SAID:

On Tuesday, representatives of both Moderna and Pfizer made remarks about vaccine efficacy against Omicron. The vaccines manufactured by the companies are both based on the mRNA technology.

“There is no world, I think, where [the effectiveness] is the same level... we had with Delta,” Moderna’s CEO, Stéphane Bancel, told the Financial Times.

“I think it’s going to be a material drop. I just don’t know how much because we need to wait for the data. But all the scientists I’ve talked to... are like, ‘This is not going to be good.’”

A more reassuring message came from Pfizer.

“We think it’s likely that people will have substantial protection against severe disease caused by Omicron,” said BioNTech CEO and co-founder Ugur

Sahin. He specified severe disease requiring hospital or intensive care.

In addition, the University of Oxford said there was no evidence that current vaccines would not prevent severe disease from Omicron, but that it was ready to rapidly update its shot, developed with AstraZeneca, if necessary.

WHAT THE FIRST CASES ARE SHOWING:

So far, some 100 or so Omicron cases have been confirmed in over 20 countries outside South Africa, including four in Israel. While many of the individuals were fully vaccinated, no report has emerged of serious symptoms. Regarding South Africa, an analyst for the Financial Times examined the data about hospitalization in the Guateng Province, considered the epicenter of the outbreak.

“So far, admissions are following the same path as past waves,” John Burn-Murdoch wrote on Twitter. “Quick notes: For cases to be rising faster while admissions are on the same pace may hint at a lower proportion of severe disease, but this may also simply be the result of more infection-acquired immunity and vax, or of cases so far being predominantly younger people.”

He also said the share of patients in intensive care units is currently much lower than at the same stage of the Delta wave, but it may be influenced by the age of the patients, being younger than with Delta. Another explanation, he added, is that the immune system gets activated and prevents the disease from deteriorating.

WHAT HEALTH OFFICIALS AROUND THE WORLD HAVE SAID:

Some health officials from different countries and organizations have also started to weigh in on vaccine efficacy.

A World Health Organization representative said Wednesday that there is no evidence so far to suggest the efficacy of vaccines have been reduced by Omicron, according to a report by Reuters.

Earlier in the day, British Health Secretary Sajid Javid noted it was possible that vaccines were less effective against the new variant, but they should still protect against serious disease.

“Our best form of defense still remains our vaccines,” Javid told Sky News. “It’s possible of course,... that it might be less effective. We just don’t know for sure yet. But it’s also very likely that it will remain effective against serious disease.”