



FAQs on COVID-19 Vaccine Efficacy & Protection



1

Indian regulators have given authorization to Covaxin even before its Phase 3 trial results were out. How do we explain this?

We are passing through the Covid-19 pandemic. COVID-19 has caused social disruption, an economic downturn, and a significant number of deaths. To control this pandemic, the society, as well as the system, may have to take steps that may also be termed as drastic. Both pre-clinical and clinical data (complete data for Phase I and II, and partial data for Phase III of Covaxin have been thoroughly scrutinized by the regulators. These data show that the vaccine is safe and induces a robust antibody response. However, to what extent the vaccine will protect the recipients from getting the disease is not fully known yet. Therefore, the regulators have allowed its use in a trial mode.

2

What does trial mode mean for a vaccine recipient?

The way we do in a clinical trial phase: first, the recipient will be asked to give written consent. Additionally, the recipient will be followed up actively to see if the vaccine has led to any side effects. In short, it will be an extension of the Phase 3 trial. But in this, the person would know that he or she has received the vaccine and not the placebo. It is completely voluntary.



3

Developing a vaccine takes many years. But this time, our scientists have developed a vaccine against the novel coronavirus in such a short time. How was this possible?

Developing a vaccine generally involves years of research. First, we need a vaccine candidate that is evaluated in animals for its safety and efficacy. After a vaccine candidate passes a pre-clinical trial, it enters the clinical trial phase. While scientists have worked round the clock in the laboratory, even regulatory approvals which used to take several months have been fast-tracked. It helped eliminate all the time lapses between the pre-clinical and clinical trial stages. Earlier, the vaccine development involved a series of steps, but in the case of the COVID-19 vaccine, the scientists and regulators worked in perfect tandem, accelerating the whole process without any compromises on any protocols and other steps.



4

What is the safety and efficacy of the vaccines used in the country?

To ensure that a vaccine is safe, we need to try it on a large number of people. **The vaccine developers have not reduced the sample size at any stage of clinical trials rather it was bigger than what we usually test a vaccine on.**

When a vaccine is tested, most of the adverse events or unwanted effects, if any, occur in the first four to six weeks of its administration. So, in order to ensure that it is safe, we keep a close watch, for the first two-three months, on the people it has been given to. This data help us decide if a vaccine is safe. All concerned in the line of vaccine development, testing and evaluation have followed these procedures in totality. Both Indian vaccines are considered safe on this yardstick.

As for the efficacy of the vaccine, we need time to tell how effective a vaccine is. All the global agencies have set the benchmark that only those vaccine candidates which show the efficacy of at least 50-60% will be considered. Most of the vaccines have shown the efficacy of 70-90% within the short period of two or three months of observation. Besides when a vaccine is given an emergency use authorizations/permission for restricted use, **as in the case of the COVID-19 vaccine, the trial follow-up continues for one to two years to assess the total duration of protection the vaccine will provide.**



5

Do I need to use the mask/other COVID appropriate precautions after receiving the vaccine?

Yes, it is absolutely necessary that everyone who has received the COVID-19 vaccine should continue to follow the COVID-appropriate behavior i.e., mask, do gaj ki doori and hand sanitization to protect themselves and those around from spreading the infection.



6

How long will I remain protected after vaccination?

The longevity of the immune response in vaccinated individuals is yet to be determined. Hence, continuing the use of masks, handwashing, physical distancing and other COVID-19 appropriate behaviours is strongly recommended.



7

Does vaccination protect me against newer strains / mutated viruses of SARS-CoV-2?

The body responds to vaccination by making more than one type of antibodies to virus parts including spike protein. Therefore, all vaccines are expected to provide a reasonable amount of protection against the mutated virus also. Based on the available data the mutations as reported are unlikely to make the vaccine ineffective.



8

Which vaccine is better between Covishield and Covaxin?

There is no head-to-head comparison done between the two vaccines being used in India so one cannot choose one over the another. Both would work fine in preventing the infection as well as prevent a person from going into a severe state of the disease. As a long-term effect, it would be preventing death for elderly people or those who have co-morbidities.



9

In how many days will the vaccination create an adequate immune response and protection?

Adequate immune response takes 2-3 weeks after completion of the entire vaccination schedule i.e., after the second dose of COVISHIELD® and COVAXIN®.



10

Does this vaccine provide herd immunity?

When an increasing number of people get vaccinated in the community, indirect protection through herd immunity develops.

The percentage of people who need to be immune in order to achieve herd immunity varies with each disease. For example, it is 95% for measles; however, the proportion of the population that must be vaccinated against COVID-19 to begin inducing herd immunity is not known.

