

# THE MORE YOU TAKE CARE OF YOURSELF, THE SAFER WE ARE

## USEFUL INFORMATION ABOUT COVID-19 VACCINATION

Play an active role in the vaccination process, ask questions about the vaccine and feel free to tell the professionals about your doubts

### 1. Which vaccines are we talking about?

**Pfizer and Moderna:** Pfizer and Moderna are mRNA vaccines and they are called COVID-19 mRNA BNT162b2 (Comirnaty-Pfizer) and COVID-19 Vaccine Moderna mRNA -1273. They use the same mechanism of action, they are highly effective, they are both extremely safe and have modest side effects that regress autonomously in a few days.

**Astrazeneca and Johnson & Johnson:** Astrazeneca and Johnson & Johnson are viral vector vaccines and they are called Vaxzevria (AstraZeneca) and Janssen (Johnson & Johnson). They use the same mechanism of action, they are highly effective, they are both extremely safe and have modest side effects that regress autonomously in a few days.

### 2. What is the COVID-19 vaccine and what is its function?

**Pfizer and Moderna:** The COVID-19 vaccine is aimed at preventing the coronavirus disease 2019 (COVID-19) in people aged 12 years or more. The vaccine does not contain the virus and cannot cause the disease.

**Astrazeneca and Johnson & Johnson:** Viral vector vaccines prevent COVID-19 disease in people aged 18 years or more. In Italy, AstraZeneca is currently recommended for people aged 60 years or more. The viral vector was made unable to replicate, so it cannot spread in the organism.

### 3. How is it administered?

**Pfizer and Moderna:** The COVID-19 vaccine is administered in two injections, usually in the muscle situated in the higher part of the arm, at a distance of at least 21 days (Pfizer) or 28 days (Moderna).

**Astrazeneca and Johnson & Johnson:** The vaccines are administered in the muscle situated in the higher part of the arm. AstraZeneca is administered in two injections at a distance of at least 10 weeks, while Johnson & Johnson is administered in a single dose.

### 4. What does it contain?

**Pfizer and Moderna:** The vaccine contains a molecule (messenger RNA), which stimulates the production of antibodies that neutralize the virus.

**Astrazeneca and Johnson & Johnson:** The vaccine is made of an adenovirus that is unable to replicate and modified to transmit the genetic information that will be necessary to create the Spike protein. That is an extraneous protein that will stimulate the immune system to react by producing antibodies.

## 5. How were clinical trials conducted?

Strict safety and effectiveness protocols were followed for the development of these vaccines too. In this case, the timing was highly reduced thanks to the previously acquired and globally shared knowledge about similar viruses. Moreover, many countries invested economic resources guaranteeing the realization of simultaneous trials, rather than sequential trials.

## 6. Is the protection effective right after the injection?

**Pfizer and Moderna:** No, the effectiveness was demonstrated ~~after~~ 7 days (Pfizer) / 14 days (Moderna) after the second injection.

**Astrazeneca and Johnson & Johnson:** No, the effectiveness was demonstrated ~~after~~ two weeks after the last injection.

## 7. Which adverse reactions were observed?

Adverse reactions were usually mild or moderate and resolved within a few days after the vaccination. These include pain, swelling and redness at the injection site, fatigue, headache, muscle and articulation pain, chills and fever, sickness/vomit, enlarged lymph nodes. Sporadic vein thrombosis episodes occurred in unusual sites in people aged less than 60 years. They were recognized as possible Astrazeneca vaccine's side effects. Predisposing risk factors were not confirmed. Reactions were more frequent after the second dose.

## 8. Why is it important to get vaccinated?

The vaccine plan will give the expected results if a significant number of people will get vaccinated soon. The benefits of the vaccine in preventing COVID disease far outweigh the risks.

## 9. Can vaccinated people still transmit the infection to others?

Even though it is reasonable that the vaccination protects from the infection, vaccinated people and individuals who are in contact with them must continue to follow COVID-19 protection measures.

## 10. Whom should you contact if an adverse reaction (pain and/or swelling at the injection site, fatigue, headache, muscle and/or limb pain, chills, fever...) occurs in the days after the vaccine administration?

It is important to report the episode to the competent Local Health Agency (Azienda USL) Pharmacovigilance Officer at the following contacts:

**Azienda usl Toscana Centro** - [farmacovigilanza@uslcentro.toscana.it](mailto:farmacovigilanza@uslcentro.toscana.it) - 0556938641

**Azienda usl Toscana Sud Est** - [farmacovigilanza@uslsudest.toscana.it](mailto:farmacovigilanza@uslsudest.toscana.it) - 05775366960

**Azienda usl Toscana Nord Ovest** - [farmacovigilanza@uslnordovest.toscana.it](mailto:farmacovigilanza@uslnordovest.toscana.it) - 05846059793

Moreover, it is possible to:

- directly report the adverse reaction by filling in the form at the website

**[www.vigifarmaco.it](http://www.vigifarmaco.it)**

- fill in the notification form available at

**[www.regione.toscana.it/-/farmacovigilanza](http://www.regione.toscana.it/-/farmacovigilanza)** and send it to the mentioned email address.

For further information, please visit the website: **[regione.toscana.it/vaccinicoVID](http://regione.toscana.it/vaccinicoVID)**