This medicine is subject to additional monitoring. This will allow quick identification of new safety information. You can help by reporting any side effects you may get. See the end of section 4 for how to report side effects.

Read all of this leaflet carefully before you receive this vaccine because it contains important information for you.
- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor, pharmacist or nurse.
- If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

What is in this leaflet
1. What Spikevax is and what it is used for
2. What you need to know before you are given Spikevax
3. How Spikevax is given
4. Possible side effects
5. How to store Spikevax
6. Contents of the pack and other information

1. What Spikevax is and what it is used for

Spikevax is a vaccine used to prevent COVID-19 caused by SARS-CoV-2. It is given to adults and children aged 6 years and older. The active substance in Spikevax is mRNA encoding the SARS-CoV-2 Spike protein. The mRNA is embedded in SM-102 lipid nanoparticles.

As Spikevax does not contain the virus, it cannot give you COVID-19.

How the vaccine works
Spikevax stimulates the body's natural defences (immune system). The vaccine works by causing the body to produce protection (antibodies) against the virus that causes COVID-19. Spikevax uses a substance called messenger ribonucleic acid (mRNA) to carry instructions that cells in the body can use to make the spike protein that is also on the virus. The cells then make antibodies against the spike protein to help fight off the virus. This will help to protect you against COVID-19.

2. What you need to know before you are given Spikevax

The vaccine must not be given if
- you are allergic to the active substance or any of the other ingredients of this vaccine (listed in section 6).

Warnings and precautions
Talk to your doctor, pharmacist or nurse before you are given Spikevax if:
- you have previously had a severe, life-threatening allergic reaction after any other vaccine injection or after you were given Spikevax in the past.
- you have a very weak or compromised immune system
- you have ever fainted following any needle injection.
- you have a bleeding disorder
- you have a high fever or severe infection; however, you can have your vaccination if you have a mild fever or upper airway infection like a cold
- you have any serious illness
- if you have anxiety related to injections

There is an increased risk of myocarditis (inflammation of the heart muscle) and pericarditis (inflammation of the lining outside the heart) after vaccination with Spikevax (see section 4).

These conditions can develop within just a few days after vaccination and have primarily occurred within 14 days. They have been observed more often after the second dose, and more often in younger males.

Following vaccination, you should be alert to signs of myocarditis and pericarditis, such as breathlessness, palpitations and chest pain, and seek immediate medical attention should these occur.

If any of the above apply to you (or you are not sure), talk to your doctor, pharmacist or nurse before you are given Spikevax.

**Capillary leak syndrome (CLS) flare-ups**
A few cases of capillary leak syndrome flare-ups (causing fluid leakage from small blood vessels (capillaries) resulting in rapid swelling of the arms and legs, sudden weight gain and feeling faint, low blood pressure) have been reported following vaccination with Spikevax. If you have previously had episodes of CLS, talk to a doctor before you are given Spikevax.

**Duration of protection**
As with any vaccine, the primary 2-dose vaccination course of Spikevax may not fully protect all those who receive it and it is not known how long you will be protected.

**Children**
Spikevax is not recommended for children aged under 6 years.

**Other medicines and Spikevax**
Tell your doctor or pharmacist if you are taking, have recently taken, or might take any other medicines. Spikevax may affect the way other medicines work, and other medicines may affect how Spikevax works.

**Immunocompromised individuals**
If you are immunocompromised, you may receive a third dose of Spikevax. The third dose may still not provide full immunity to COVID-19 in people who are immunocompromised, and you should continue to maintain physical precautions to help prevent COVID-19. In addition, your close contacts should be vaccinated as appropriate. Discuss appropriate individual recommendations with your doctor.

**Pregnancy and breast-feeding**
If you are pregnant or think you may be pregnant, tell your doctor, nurse or pharmacist before you receive this vaccine. Spikevax can be used during pregnancy. A large amount of information from pregnant women vaccinated with Spikevax during the second and third trimester have not shown negative effects on the pregnancy or the newborn baby. While information on effects on pregnancy or the newborn baby after vaccination during the first trimester is limited, no change to the risk for miscarriage has been seen.

Spikevax can be given during breastfeeding.

**Driving and using machines**
Do not drive or use machines if you are feeling unwell after vaccination. Wait until any effects of the vaccine have worn off before you drive or use machines.
Spikevax contains sodium
Spikevax contains less than 1 mmol (23 mg) sodium per dose and, that is to say, essentially ‘sodium-free’.

3. How you will be given Spikevax

Individuals 12 years of age and older
Spikevax will be given to you as two 0.5 mL injections.

Children 6 through 11 years of age
Spikevax will be given to you as two 0.25 mL injections.
It is recommended to get the second dose of the same vaccine 28 days after the first dose to complete the vaccination course.

If you miss an appointment for your primary 2nd dose of Spikevax
- If you miss an appointment, arrange another visit as soon as possible with you doctor, nurse, or pharmacist.
- If you miss a scheduled injection, you may not be fully protected against COVID-19.

A booster dose (0.25 mL) of Spikevax may be given at least 3 months after the second dose in individuals 18 years of age and older.

If you are immunocompromised, you may receive a third dose (0.5 mL for individuals 12 years of age and older; 0.25 mL for children 6 through 11 years) of Spikevax at least 1 month after the second dose.

Your doctor, pharmacist or nurse will inject the vaccine into a muscle (intramuscular injection) in your upper arm.

During and after each injection of the vaccine, your doctor, pharmacist or nurse will watch over you for at least 15 minutes to monitor for signs of an allergic reaction.

If you have any further questions on the use of this vaccine, ask your doctor, pharmacist or nurse.

4. Possible side effects

Like all medicines, this vaccine can cause side effects, although not everybody gets them. Most side effects go away within a few days of appearing. If side effects such as pain and/or fever are troublesome, they can be treated by medicines for pain and fever such as paracetamol.

Get urgent medical attention if you get any of the following signs and symptoms of an allergic reaction:
- feeling faint or light-headed;
- changes in your heartbeat;
- shortness of breath;
- wheezing;
- swelling of your lips, face, tongue or throat;
- hives or rash;
- nausea or vomiting;
- stomach pain.

Talk to your doctor or nurse if you develop any other side effects. These can include:

Very common (may affect more than 1 in 10 people):
- swelling/tenderness of the underarm glands
- headache
- nausea
- vomiting
- muscle ache, joint aches, and stiffness
- pain or swelling at the injection site
- redness at the injection site (some of which may occur approximately 9 to 11 days after the injection)
- feeling very tired
- chills
- fever

**Common** (may affect up to 1 in 10 people):
- diarrhoea
- rash
- rash or hives at the injection site (some of which may occur approximately 9 to 11 days after the injection)

**Uncommon** (may affect up to 1 in 100 people):
- itchiness at the injection site
- dizziness
- stomach pain

**Rare** (may affect up to 1 in 1,000 people)
- temporary one-sided facial drooping (Bell’s palsy)
- swelling of the face (Swelling of the face may occur in patients who have had facial cosmetic injections.)
- decreased sense of touch or sensation
- unusual feeling in the skin, such as tingling or a crawling feeling (paraesthesia)

**Very rare** (may affect up to 1 in 10,000 people)
- inflammation of the heart muscle (myocarditis) or inflammation of the lining outside the heart (pericarditis) which can result in breathlessness, palpitations or chest pain

**Frequency unknown**
- severe allergic reactions with breathing difficulties (anaphylaxis)
- reaction of increased sensitivity or intolerance by the immune system (hypersensitivity)
- a skin reaction that causes red spots or patches on the skin that may look like a target or “bulls-eye” with a dark red centre surrounded by paler red rings (erythema multiforme)

**Reporting of side effects**
If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. If you are concerned about a side effect it can be reported directly via the Coronavirus Yellow Card reporting site or search for MHRA Yellow Card in the Google Play or Apple App Store and include the vaccine brand and batch/Lot number if available. By reporting side effects you can help provide more information on the safety of this vaccine.

**5. How to store Spikevax**

Keep this vaccine out of the sight and reach of children.

Do not use this vaccine after the expiry date which is stated on the label after EXP. The expiry date refers to the last day of that month.

Information about storage, expiry, and use and handling are described in the section intended for healthcare professionals at the end of the package leaflet.
Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help protect the environment.

6. Contents of the pack and other information

What Spikevax contains

This vaccine contains polyethylene glycol/macrogol (PEG) as part of PEG2000-DMG.

- This is a multidose vial that contains 10 doses of 0.5 mL each or a maximum of 20 doses of 0.25 mL each.
- One dose (0.5 mL) contains 100 micrograms of messenger RNA (mRNA) (embedded in SM-102 lipid nanoparticles).
- One dose (0.25 mL) contains 50 micrograms of messenger RNA (mRNA) (embedded in SM-102 lipid nanoparticles).
- Single-stranded, 5′-capped messenger RNA (mRNA) produced using a cell-free in vitro transcription from the corresponding DNA templates, encoding the viral spike (S) protein of SARS-CoV-2.
- The other ingredients are lipid SM-102 (heptadecan-9-yl 8-{(2-hydroxyethyl)[6-oxo-6-(undecyloxy)hexyl]amino}octanoate), cholesterol, 1,2-distearoyl-sn-glycero-3-phosphocholine (DSPC), 1,2-Dimyristoyl-rac-glycero-3-methoxypolyethylene glycol-2000 (PEG2000 DMG), trometamol, trometamol hydrochloride, acetic acid, sodium acetate trihydrate, sucrose, water for injections.

What Spikevax looks like and contents of the pack

Spikevax is a white to off white dispersion supplied in a glass vial with a rubber stopper and aluminium seal.

Pack size: 10 multidose vials

Marketing Authorisation Holder:
MODERNA BIOTECH SPAIN, S.L.
Calle del Príncipe de Vergara 132 Plt 12
Madrid 28002
Spain

Manufacturer:
Rovi Pharma Industrial Services, S.A.
Paseo de Europa, 50
28703. San Sebastián de los Reyes
Madrid, Spain

Recipharm Monts
18 Rue de Montbazon
Monts, France 37260

Moderna Biotech Spain S.L.
Calle del Príncipe de Vergara 132 Plt 12
Madrid 28002
Spain

For any information about this medicine, please contact the local representative of the Marketing Authorisation Holder.

United Kingdom (Northern Ireland)
Tel: 0800 085 7562
This leaflet was last revised on 07-09-2022.

This vaccine has been given ‘conditional approval’. This means that there is more evidence to come about this vaccine.

Scan the code with a mobile device to get the package leaflet in different languages.

Or visit the URL https://www.ModernaCovid19Global.com
The following information is intended for healthcare professionals only:

Traceability
In order to improve the traceability of biological medicinal products, the name and the batch number of the administered product should be clearly recorded.

Spikevax should be administered by a trained healthcare professional.

The vaccine comes ready to use once thawed.

Do not shake or dilute.

Spikevax vials are multidose. Ten (10) doses (of 0.5 mL each) or a maximum of twenty (20) doses (of 0.25 mL each) can be withdrawn from each multidose vial.

Pierce the stopper preferably at a different site each time. Do not puncture the vial more than 20 times.

An additional overfill is included in each vial to ensure that 10 doses of 0.5 mL or a maximum of 20 doses of 0.25 mL can be delivered.

Thawed vials and filled syringes can be handled in room light conditions.

For the primary series, Spikevax should be administered as two 0.5 mL (100 microgram) doses for individuals 12 years of age and older. Spikevax should be administered as two 0.25 mL (50 microgram) doses for children 6 through 11 years of age.

It is recommended to administer the second dose 28 days after the first dose.

A third dose may be given at least 1 month after the second dose to individuals 12 years of age and older (0.5 mL, 100 micrograms) and children 6 through 11 years (0.25 mL, 50 micrograms) who are severely immunocompromised.

A booster dose (0.25 mL, 50 micrograms) of Spikevax may be given at least 3 months after a primary series in individuals 18 years of age and older.

As with all injectable vaccines, appropriate medical treatment and supervision must always be readily available in the event of an anaphylactic reaction following the administration of Spikevax. Individuals should be observed by a healthcare professional for at least 15 minutes after vaccination.

There are no data to assess the concomitant administration of Spikevax with other vaccines. Spikevax must not be mixed with other vaccines or medicinal products in the same syringe.

The vaccine must be administered intramuscularly. The preferred site is the deltoid muscle of the upper arm.
Information about storage and handling

Frozen Storage

Store frozen between -50°C to -15°C.
Do not store below -50°C.
Store in the original carton to protect from light.

Thaw Each Vial Before Use

2 hours and 30 minutes in refrigerator
2°C to 8°C

OR

1 hour at room temperature
15°C to 25°C

Let vial sit at room temperature for 15 minutes before administering

Instructions Once Thawed

Unpunctured Vial

Maximum time in refrigerator
7°C or less
30 days

Cool storage up to room temperature
8°C to 32°C
24 hours

After first dose has been withdrawn

Maximum time in refrigerator or cool temperature
3°C to 8°C
6 hours

Vaccine must be kept between 2°C to 8°C. Record the date and time of discard on the vial label.
Discard punctured vials after 6 hours.

Withdraw each dose of vaccine from the vial using a new sterile needle and syringe for each injection to prevent transmission of infectious agents from one person to another.
The dose in the syringe should be used immediately.

Once the vial has been punctured to withdraw the initial dose, the vaccine should be used immediately and be discarded after 6 hours.

Any unused vaccine or waste material should be disposed of in accordance with local requirements.

NEVER refreeze thawed vaccine

Administration

Swirl vial gently after thawing and before each withdrawal.
The vaccine comes ready to use once thawed. Do not shake or dilute.

Prior to injection, inspect each dose to:

- Confirm liquid is white to off-white in colour in both vial and syringe.
- Verify syringe volume.
- The vaccine may contain white or translucent product-related particulates.
- If dosage is incorrect, or discoloration and other particulate matter is present, do not administer the vaccine.