

## **Package leaflet: Information for the user**

### **Spikevax bivalent Original/Omicron BA.4-5 (50 micrograms/50 micrograms)/mL dispersion for injection elasomeran/davesomeran**

▼ 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 bivalent Original/Omicron BA.4-5 is and what it is used for
2. What you need to know before you are given Spikevax bivalent Original/Omicron BA.4-5
3. How Spikevax bivalent Original/Omicron BA.4-5 is given
4. Possible side effects
5. How to store Spikevax bivalent Original/Omicron BA.4-5
6. Contents of the pack and other information

#### **1. What Spikevax bivalent Original/Omicron BA.4-5 is and what it is used for**

Spikevax bivalent Original/Omicron BA.4-5 is a vaccine used to prevent COVID-19 caused by SARS-CoV-2. It is given to adults and children aged 6 months and older. The active substance in the vaccine is ribonucleic acid (RNA) encoding the SARS-CoV-2 spike protein. The RNA is embedded in SM-102 lipid nanoparticles.

Spikevax bivalent Original/Omicron BA.4-5 contains two different types of messenger ribonucleic acid (mRNA), elasomeran and davesomeran. Elasomeran encodes the spike protein of the original strain of the virus whereas davesomeran encodes the spike protein of the Omicron BA.4-5 variant of the virus. The original Spikevax vaccine contains elasomeran only.

As Spikevax bivalent Original/Omicron BA.4-5 does not contain the virus, it cannot give you COVID-19.

#### **How the vaccine works**

Spikevax bivalent Original/Omicron BA.4-5 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 bivalent Original/Omicron BA.4-5 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 bivalent Original/Omicron BA.4-5**

**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 bivalent Original/Omicron BA.4-5 if:

- you have previously had a severe, life-threatening **allergic** reaction after any other vaccine injection or after you were given Spikevax (original) or Spikevax bivalent Original/Omicron BA.1 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

### **Myocarditis/pericarditis**

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 in younger males, and more often after the second dose compared to the first dose.

Most cases of myocarditis and pericarditis recover. Some cases required intensive care support and fatal cases have been seen.

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 bivalent Original/Omicron BA.4-5.

### **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 (original). If you have previously had episodes of CLS, talk to a doctor before you are given Spikevax bivalent Original/Omicron BA.4-5.

### **Duration of protection**

As with any vaccine, Spikevax bivalent Original/Omicron BA.4-5 may not fully protect all those who receive it and it is not known how long you will be protected.

### **Children**

Spikevax bivalent Original/Omicron BA.4-5 is not recommended for children aged under 6 months.

### **Other medicines and Spikevax bivalent Original/Omicron BA.4-5**

Tell your doctor or pharmacist if you are taking, have recently taken, or might take any other medicines. Spikevax bivalent Original/Omicron BA.4-5 may affect the way other medicines work, and other medicines may affect how Spikevax bivalent Original/Omicron BA.4-5 works.

### **Immunocompromised individuals**

The efficacy of Spikevax bivalent Original/Omicron BA.4-5 may be lower in people who are immunocompromised. In these cases, 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. No data are available yet regarding the use of Spikevax bivalent Original/Omicron BA.4-5 during pregnancy. However, a large amount of information from pregnant women vaccinated with Spikevax (original) 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 increased risk for miscarriage has been seen. Since differences between the two products are only related to the spike protein in the vaccine, and there are no clinically meaningful differences, Spikevax bivalent Original/Omicron BA.4-5 can be used during pregnancy.

No data are available yet regarding the use of Spikevax bivalent Original/Omicron BA.4-5 during breast feeding. However, no effects on the breastfed newborn/infant are anticipated. Data from women who were breastfeeding after vaccination with Spikevax (original) have not shown a risk for side effects in breastfed newborns/infants. Spikevax bivalent Original/Omicron BA.4-5 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 bivalent Original/Omicron BA.4-5 contains sodium**

This medicine contains less than 1 mmol sodium (23 mg) per dose and, that is to say, essentially ‘sodium-free’.

## **3. How you will be given Spikevax bivalent Original/Omicron BA.4-5**

**Table 1. Spikevax bivalent Original/Omicron BA.4-5 posology**

<b>Age(s)</b>	<b>Dose</b>	<b>Additional recommendations</b>
Children 6 months through 4 years of age, without prior vaccination and no known history of SARS-CoV-2 infection	Two doses of 0.25 mL each, given intramuscularly	The second dose should be administered 28 days after the first dose.  If a child has received one prior dose of Spikevax, one dose of Spikevax bivalent Original/Omicron BA.4-5 should be administered to complete the two-dose series.
Children 6 months through 4 years of age, with prior vaccination or known history of SARS-CoV-2 infection	One dose of 0.25 mL, given intramuscularly	Spikevax bivalent Original/Omicron BA.4-5 should be administered at least 3 months
Children 5 years through 11 years of age, with or without prior vaccination	One dose of 0.25 mL, given intramuscularly	

Individuals 12 years of age and older, with or without prior vaccination	One dose of 0.5 mL, given intramuscularly	after the most recent dose of a COVID-19 vaccine.
Individuals 65 years of age and older	One dose of 0.5 mL, given intramuscularly	One additional dose may be administered at least 3 months after the most recent dose of a COVID-19 vaccine.

**Table 2. Spikevax bivalent Original/Omicron BA.4-5 posology for immunocompromised individuals**

Age(s)	Dose	Additional recommendations
Immunocompromised children 6 months through 4 years of age, without prior vaccination	Two doses of 0.25 mL, given intramuscularly	A third dose in severely immunocompromised may be given at least 28 days after the second dose.
Immunocompromised children 6 months through 4 years of age, with prior vaccination	One dose of 0.25 mL, given intramuscularly	Additional age-appropriate dose(s) may be administered in severely immunocompromised at least 2 months following the most recent dose of a COVID-19 vaccine at the discretion of the healthcare provider, taking into consideration the individual's clinical circumstances.
Immunocompromised children 5 years through 11 years of age, with or without prior vaccination	One dose of 0.25 mL, given intramuscularly	
Immunocompromised individuals 12 years of age and older, with or without prior vaccination	One dose of 0.5 mL, given intramuscularly	

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
- decreased appetite (observed in 6 month to 5 year olds)
- irritability/crying (observed in 6 month to 5 year olds)
- headache
- sleepiness (observed in 6 month to 5 year olds)
- 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
- raised, itchy rash (urticaria) (which may occur from the time of injection and up to approximately two weeks after the injection)

**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 individuals 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 not known**

- 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)
- heavy menstrual bleeding (most cases appeared to be non-serious and temporary in nature)
- extensive swelling of the vaccinated limb
- rash elicited by external stimulus such as firm stroking, scratching, or pressure to the skin (mechanical urticaria)
- raised, itchy rash with a duration of more than six weeks (chronic urticaria)

## **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 bivalent Original/Omicron BA.4-5**

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 bivalent Original/Omicron BA.4-5 contains**

This is a multidose vial that contains 5 doses of 0.5 mL or a maximum of 10 doses of 0.25 mL each.

One dose (0.5 mL) contains 25 micrograms of elasomeran, a COVID-19 mRNA Vaccine (embedded in SM-102 lipid nanoparticles) and 25 micrograms of davesomeran, a COVID-19 mRNA Vaccine (embedded in SM-102 lipid nanoparticles).

One dose (0.25 mL) contains 12.5 micrograms of elasomeran and 12.5 micrograms of davesomeran, a COVID-19 mRNA Vaccine (embedded in SM-102 lipid nanoparticles).

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

Elasomeran is a 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 (original).

Davesomeran is a 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 Omicron variant lineages BA.4 and BA.5. The S proteins of the SARS-CoV-2 Omicron variant lineages BA.4 and BA.5 are identical.

The other ingredients are 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 bivalent Original/Omicron BA.4-5 looks like and contents of the pack**

#### Multidose vial

Spikevax bivalent Original/Omicron BA.4-5 is a white to off white dispersion supplied in a glass vial with a rubber stopper and a blue flip-off plastic cap with aluminium seal.

Pack size: 10 multidose vials. Each vial contains 2.5 mL.

**Marketing Authorisation Holder**

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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 19 March 2024.**

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



Or visit the URL <https://www.ModernaCovid19Global.com>

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**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 bivalent Original/Omicron BA.4-5 (50 micrograms/50 micrograms)/mL dispersion for injection (multidose vials with a blue flip-off cap)

Spikevax bivalent Original/Omicron BA.4-5 should be administered by a trained healthcare professional.

Vials are stored in a freezer at -50°C to -15°C.

The vaccine comes ready to use once thawed.

Do not shake or dilute. Swirl the vial gently after thawing and before each withdrawal. Pierce the stopper preferably at a different site each time.

Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration, whenever solution and container permit.

Spikevax bivalent Original/Omicron BA.4-5 is a white to off-white dispersion. It may contain white or translucent product-related particulates. Do not administer if vaccine is discoloured or contains other particulate matter.

Five (5) doses (of 0.5 mL each) or a maximum of ten (10) doses (of 0.25 mL each) can be withdrawn from each multidose vial. An additional overfill is included in each vial to ensure that 5 doses of 0.5 mL or a maximum of 10 doses of 0.25 mL can be delivered.

Verify that the vial has a blue flip-off cap and the product name is Spikevax bivalent Original/Omicron BA.4-5. If the vial has a blue flip-off cap and the product name is Spikevax 0.1 mg/mL or Spikevax bivalent Original/Omicron BA.1, please make reference to the Summary of Product Characteristics for that formulation.

Thaw each multidose vial before use following the instructions below (Table 3). When the vial is thawed in the refrigerator, let it sit at room temperature for 15 minutes before administering.

**Table 3. Thawing instructions for multidose vials before use**


Configuration	Thaw instructions and duration			
	Thaw temperature (in a refrigerator)	Thaw duration	Thaw temperature (at room temperature)	Thaw duration
Multidose vial	2° – 8°C	2 hours and 30 minutes	15°C – 25°C	1 hour



**Thaw each vial before use**  
Images for illustrative purposes only

**2 hours and 30 minutes in refrigerator**

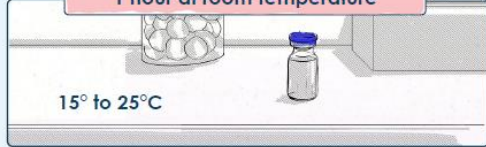
**2° to 8°C**  
(within the 30 days shelf life at 2° to 8°C)



OR

**1 hour at room temperature**

**15° to 25°C**



Let vial sit at room temperature for 15 minutes before administering

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**Instructions Once Thawed**

**Unpunctured Vial**


Maximum times

30

days

Refrigerator

2° to 8°C



24

hours

Cool storage up to room temperature

8° to 25°C


**After first dose has been withdrawn**

Maximum time

6

hours

Refrigerator or room temperature



Vial should be held between 2° to 25°C. Record the date and time of discard on the vial label. Discard punctured vial 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**

After thawing, do not refreeze.

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

Dosing and schedule

**Table 4. Spikevax bivalent Original/Omicron BA.4-5 dosing**

Age(s)	Dose	Additional recommendations
Children 6 months through 4 years of age, without prior vaccination and no known history of SARS-CoV-2 infection	Two doses of 0.25 mL each, given intramuscularly	The second dose should be administered 28 days after the first dose.  If a child has received one prior dose of Spikevax, one dose of Spikevax bivalent Original/Omicron BA.4-5 should be administered to complete the two-dose series.
Children 6 months through 4 years of age, with prior vaccination or known history of SARS-CoV-2 infection	One dose of 0.25 mL, given intramuscularly	Spikevax bivalent Original/Omicron BA.4-5 should be administered at least 3 months after the most recent dose of a COVID-19
Children 5 years through 11 years of age, with or without prior vaccination	One dose of 0.25 mL, given intramuscularly	

Individuals 12 years of age and older, with or without prior vaccination	One dose of 0.5 mL, given intramuscularly	vaccine and/or a known SARS-CoV-2 infection.
Individuals 65 years of age and older	One dose of 0.5 mL, given intramuscularly	One additional dose may be administered at least 3 months after the most recent dose of a COVID-19 vaccine.

**Table 5. Spikevax bivalent Original/Omicron BA.4-5 posology for immunocompromised individuals**

Age(s)	Dose	Additional recommendations
Immunocompromised children 6 months through 4 years of age, without prior vaccination	Two doses of 0.25 mL, given intramuscularly	A third dose in severely immunocompromised may be given at least 28 days after the second dose.
Immunocompromised children 6 months through 4 years of age, with prior vaccination	One dose of 0.25 mL, given intramuscularly	Additional age-appropriate dose(s) may be administered in severely immunocompromised at least 2 months following the most recent dose of a COVID-19 vaccine at the discretion of the healthcare provider, taking into consideration the individual's clinical circumstances.
Immunocompromised children 5 years through 11 years of age, with or without prior vaccination	One dose of 0.25 mL, given intramuscularly	
Immunocompromised individuals 12 years of age and older, with or without prior vaccination	One dose of 0.5 mL, given intramuscularly	

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 bivalent Original/Omicron BA.4-5.

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 bivalent Original/Omicron BA.4-5 with other vaccines. Spikevax bivalent Original/Omicron BA.4-5 must not be mixed with other vaccines or medicinal products in the same syringe.

#### Administration

The vaccine must be administered intramuscularly. The preferred site is the deltoid muscle of the upper arm.

### 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 discolouration and other particulate matter is present, do not administer the vaccine.

