Package leaflet: Information for the user

IVEMEND® 150 mg powder for solution for infusion
fosaprepitant

Read all of this leaflet carefully before you start using this medicine 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 IVEMEND is and what it is used for
2. What you need to know before you use IVEMEND
3. How to use IVEMEND
4. Possible side effects
5. How to store IVEMEND
6. Contents of the pack and other information

1. What IVEMEND is and what it is used for

IVEMEND contains the active substance fosaprepitant which is converted to aprepitant in your body. It belongs to a group of medicines called "neurokinin 1 (NK1) receptor antagonists". The brain has a specific area that controls nausea and vomiting. IVEMEND works by blocking signals to that area, thereby reducing nausea and vomiting. IVEMEND is used in adults, adolescents, and children aged 6 months or older in combination with other medicines to prevent nausea and vomiting caused by chemotherapy (cancer treatment) that is a strong or moderate trigger of nausea and vomiting.

2. What you need to know before you use IVEMEND

Do not use IVEMEND
- if you are allergic to fosaprepitant, aprepitant, or to polysorbate 80 or any of the other ingredients of this medicine (listed in section 6).
- with medicines containing pimozide (used to treat psychiatric illnesses), terfenadine and astemizole (used for hay fever and other allergic conditions), cisapride (used for treating digestive problems). Tell your doctor if you are taking these medicines since the treatment must be modified before you start using IVEMEND.

Warnings and precautions

Talk to your doctor, pharmacist, or nurse before using IVEMEND.

Before treatment with this medicine, tell your doctor if you have liver disease because the liver is important in breaking down the medicine in the body. Your doctor may therefore have to monitor the condition of your liver.

Children and adolescents
Do not give IVEMEND to children under 6 months of age or who weigh less than 6 kg, because it has not been studied in this population.
Other medicines and IVEMEND

IVEMEND can affect other medicines both during and after treatment with IVEMEND. There are some medicines that should not be taken with IVEMEND (such as pimozide, terfenadine, astemizole, and cisapride) or that require a dose adjustment (see also ‘Do not use IVEMEND’).

The effects of IVEMEND or other medicines might be influenced if you take IVEMEND together with other medicines including those listed below. Please talk to your doctor or pharmacist if you are taking any of the following medicines:

- birth control medicines which can include birth control pills, skin patches, implants, and certain Intrauterine devices (IUDs) that release hormones may not work adequately when taken together with IVEMEND. Another or additional non-hormonal form of birth control should be used during treatment with IVEMEND and for up to 2 months after using IVEMEND,
- ciclosporin, tacrolimus, sirolimus, everolimus (immunosuppressants),
- alfentanil, fentanyl (used to treat pain),
- quinidine (used to treat an irregular heart beat),
- irinotecan, etoposide, vinorelbine, ifosfamide (medicines used to treat cancer),
- medicines containing ergot alkaloid derivatives such as ergotamine and diergotamine (used for treating migraines),
- warfarin, acenocoumarol (blood thinners; blood tests may be required),
- rifampicin, clarithromycin, telithromycin (antibiotics used to treat infections),
- phenytoin (a medicine used to treat seizures),
- carbamazepine (used to treat depression and epilepsy),
- midazolam, triazolam, phenobarbital (medicines used to produce calmness or help you sleep),
- St. John’s Wort (an herbal preparation used to treat depression),
- protease inhibitors (used to treat HIV infections),
- ketoconazole except shampoo (used to treat Cushing’s syndrome – when the body produces an excess of cortisol),
- itraconazole, voriconazole, posaconazole (antifungals),
- nefazodone (used to treat depression),
- diltiazem (a medicine used to treat high blood pressure),
- corticosteroids (such as dexamethasone),
- anti-anxiety medicines (such as alprazolam),
- tolbutamide (a medicine used to treat diabetes).

Tell your doctor about any other medicines or herbal medicines you are taking, have recently taken, or might take.

Pregnancy and breast-feeding

This medicine should not be used during pregnancy unless clearly necessary. If you are pregnant or breast-feeding, may be pregnant or are planning to have a baby, ask your doctor for advice before receiving this medicine.

For information regarding birth control, see ‘Other medicines and IVEMEND’.

It is not known whether IVEMEND is excreted in human milk; therefore, breast-feeding is not recommended during treatment with this medicine. It is important to tell your doctor if you are breast-feeding or are planning to breast-feed before receiving this medicine.

Driving and using machines

It should be taken into account that some people get dizzy and get sleepy after using IVEMEND. If you get dizzy or get sleepy, avoid driving or using machines after using this medicine (see ‘Possible side effects’).

IVEMEND contains sodium

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

In adults (18 years of age and older), the recommended dose of IVEMEND is 150 mg fosaprepitant on Day 1 (day of chemotherapy).

In children and adolescents (6 months to 17 years of age), the recommended dose of IVEMEND is based on the patient’s age and weight. Depending on the chemotherapy treatment, there are two ways IVEMEND may be given:
- IVEMEND is given only on Day 1 (single day of chemotherapy)
- IVEMEND is given on Day 1, 2, and 3 (single or multiple days of chemotherapy)
  - Oral formulations of aprepitant may be prescribed on Days 2 and 3 instead of IVEMEND.

The powder is reconstituted and diluted before use. The solution for infusion is given to you by a health care professional, such as a doctor or nurse, via an intravenous infusion (a drip) approximately 30 minutes before you start the chemotherapy treatment in adults or 60 – 90 minutes before you start the chemotherapy treatment in children and adolescents. Your doctor may ask you to take other medicines including a corticosteroid (such as dexamethasone) and a ‘5HT3 antagonist’ (such as ondansetron) for preventing nausea and vomiting. Check with your doctor or pharmacist if you are not sure.

4. **Possible side effects**

Like all medicines, this medicine can cause side effects, although not everybody gets them.

**Stop taking IVEMEND and see a doctor immediately if you notice any of the following side effects, which may be serious, and for which you may need urgent medical treatment:**
- Hives, rash, itching, difficulty breathing or swallowing, or a serious decrease of blood pressure (frequency not known, cannot be estimated from the available data); these are signs of a serious allergic reaction.
- Infusion site reactions (ISR) at or near the infusion site. Most severe ISR have happened with a certain type of chemotherapy medicine that can burn or blister your skin (vesicant) with side effects, including pain, swelling and redness. Death of skin tissue (necrosis) has happened in some people getting this type of chemotherapy medicine.

Other side effects that have been reported are listed below.

**Common side effects (may affect up to 1 in 10 people) are:**
- constipation, indigestion,
- headache,
- tiredness,
- loss of appetite,
- hiccups,
- increased amount of liver enzymes in your blood.

**Uncommon side effects (may affect up to 1 in 100 people) are:**
- dizziness, sleepiness,
- acne, rash,
- anxiousness,
- burping, nausea, vomiting, heartburn, stomach pain, dry mouth, passing wind,
- increased painful or burning urination,
- weakness, generally feeling unwell,
- reddening of the face/skin, hot flush,
- fast or irregular heartbeats, blood pressure increased,
- fever with increased risk of infection, lowering of red blood cells,
- infusion site pain, infusion site redness, infusion-site itching, infusion site vein inflammation.

**Rare side effects (may affect up to 1 in 1,000 people) are:**
- difficulty thinking, lack of energy, taste disturbance,
- sensitivity of the skin to sun, excessive sweating, oily skin, sores on skin, itching rash, Stevens-Johnson syndrome/toxic epidermal necrolysis (rare severe skin reaction),
- euphoria (feeling of extreme happiness), disorientation,
- bacterial infection, fungal infection,
- severe constipation, stomach ulcer, inflammation of the small intestine and colon, sores in mouth, bloating,
- frequent urination, passing more urine than normal, presence of sugar or blood in urine,
- chest discomfort, swelling, change in the manner of walking,
- cough, mucus in back of throat, throat irritation, sneezing, sore throat,
- eye discharge and itching,
- ringing in the ear,
- muscle spasms, muscle weakness,
- excessive thirst,
- slow heartbeat, heart and blood vessel disease,
- lowering of white blood cells, low sodium levels in the blood, weight loss,
- hardening of site of infusion.

**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. You can also report side effects directly via the Yellow Card Scheme at: www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store. By reporting side effects you can help provide more information on the safety of this medicine.

5. **How to store IVEMEND**

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

Do not use this medicine after the expiry date which is stated on the carton and vial after EXP. The first 2 numbers indicate the month; the next 4 numbers indicate the year.

Store in a refrigerator (2°C - 8°C).

The reconstituted and diluted solution is stable for 24 hours at 25°C.

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 IVEMEND contains**
- The active substance is fosaprepitant. Each vial contains fosaprepitant dimeglumine equivalent to 150 mg fosaprepitant. After reconstitution and dilution 1 ml of solution contains 1 mg fosaprepitant (1 mg/ml).
- The other ingredients are: disodium edetate (E386), polysorbate 80 (E433), lactose anhydrous, sodium hydroxide (E524) (for pH adjustment) and/or hydrochloric acid diluted (E507) (for pH adjustment).

**What IVEMEND looks like and contents of the pack**
IVEMEND is a white to off-white powder for solution for infusion.
The powder is contained in a clear glass vial with a rubber stopper and an aluminium seal with a grey plastic flip off cap.

Each vial contains 150 mg of fosaprepitant. Pack sizes: 1 or 10 vials.

Not all pack sizes may be marketed.

**Marketing Authorisation Holder and Manufacturer**

**Marketing Authorisation Holder in Great Britain:** Merck Sharp & Dohme (UK) Limited, 120 Moorgate, London EC2M 6UR, UK

**Marketing Authorisation Holder in UK (Northern Ireland):** Merck Sharp & Dohme B.V., Waarderweg 39, 2031 BN Haarlem, The Netherlands

**Manufacturer**
Merck Sharp & Dohme B. V., Waarderweg 39, 2031 BN Haarlem, The Netherlands

For any information about this medicine, please contact:

Merck Sharp & Dohme (UK) Limited
medicalinformationuk@msd.com

**This leaflet was last revised in May 2021.**

Detailed information on this medicine is available on the European Medicines Agency web site:

© Merck Sharp & Dohme (UK) Limited, 2021. All rights reserved.

The following information is intended for healthcare professionals only:

Instructions of how to reconstitute and dilute IVEMEND 150 mg

1. Inject 5 ml sodium chloride 9 mg/ml (0.9 %) solution for injection into the vial. Assure that sodium chloride 9 mg/ml (0.9 %) solution for injection is added to the vial along the vial wall in order to prevent foaming. Swirl the vial gently. Avoid shaking and jetting sodium chloride 9 mg/ml (0.9 %) solution for injection into the vial.

2. Prepare an infusion bag filled with 145 ml of sodium chloride 9 mg/ml (0.9 %) solution for injection (for example, by removing 105 ml of sodium chloride 9 mg/ml (0.9 %) solution for injection from a 250 ml sodium chloride 9 mg/ml (0.9 %) solution for injection infusion bag).

3. Withdraw the entire volume from the vial and transfer it into an infusion bag containing 145 ml of sodium chloride 9 mg/ml (0.9 %) solution for injection to yield a total volume of 150 ml and final concentration of 1 mg/ml. Gently invert the bag 2-3 times (see ‘How to use IVEMEND’).

4. Determine the volume to be administered from this prepared infusion bag, based on the recommended dose (see Summary of Product Characteristic (SmPC), section 4.2).

   **Adults**
   The entire volume of the prepared infusion bag (150 ml) should be administered.

   **Paediatrics**
   In patients 12 years and older, the volume to be administered is calculated as follows:
   - Volume to administer (ml) equals the recommended dose (mg)

   In patients 6 months to less than 12 years, the volume to be administered is calculated as follows:
   - Volume to administer (ml) = recommended dose (mg/kg) x weight (kg)
   - Note: Do not exceed maximum doses (see Summary of Product Characteristic (SmPC), section 4.2).

5. If necessary, for volumes less than 150 ml, the calculated volume can be transferred to an appropriate size bag or syringe prior to administration by infusion.

The reconstituted and diluted final solution is stable for 24 hours at 25°C.

Parenteral medicines should be inspected visually for particulate matter and discoloration before administration whenever solution and container permit.

The appearance of the reconstituted solution is the same as the appearance of the diluent.

Discard any remaining solution and waste material. Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

The medicinal product must not be reconstituted or mixed with solutions for which physical and chemical compatibility has not been established (see Summary of Product Characteristic (SmPC), section 6.2).