

## Package leaflet: Information for the user

### INVANZ<sup>®</sup> 1 g powder for concentrate for solution for infusion ertapenem

**Read all of this leaflet carefully before you are given 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, nurse or pharmacist.
- This medicine has been prescribed for you only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- If you get any side effects, talk to your doctor, nurse or pharmacist. This includes any possible side effects not listed in this leaflet. See section 4.

#### **What is in this leaflet**

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

#### **1. What INVANZ is and what it is used for**

INVANZ contains ertapenem which is an antibiotic of the beta-lactam group. It has the ability to kill a wide range of bacteria (germs) that cause infections in various parts of the body.

INVANZ can be given to persons 3 months of age and older.

Treatment:

Your doctor has prescribed INVANZ because you or your child has one (or more) of the following types of infection:

- Infection in the abdomen
- Infection affecting the lungs (pneumonia)
- Gynaecological infections
- Skin infections of the foot in diabetic patients.

Prevention:

- Prevention of surgical site infections in adults following surgery of the colon or rectum.

#### **2. What you need to know before you are given INVANZ**

##### **Do not use INVANZ**

- if you are allergic to the active substance (ertapenem) or any of the other ingredients of this medicine (listed in section 6)
- if you are allergic to antibiotics such as penicillins, cephalosporins or carbapenems (which are used to treat various infections).

##### **Warnings and precautions**

Talk to your doctor, nurse or pharmacist before taking INVANZ.

During treatment, if you experience an allergic reaction (such as swelling of the face, tongue or throat, difficulty in breathing or swallowing, skin rash), tell your doctor straight away as you may need urgent medical treatment.

While antibiotics including INVANZ kill certain bacteria, other bacteria and fungi may continue to grow more than normal. This is called overgrowth. Your doctor will monitor you for overgrowth and treat you if necessary.

It is important that you tell your doctor if you have diarrhoea before, during or after your treatment with INVANZ. This is because you may have a condition known as colitis (an inflammation of the bowel). Do not take any medicine to treat diarrhoea without first checking with your doctor.

Tell your doctor if you are taking medicines called valproic acid or sodium valproate (see **Other medicines and INVANZ** below).

Tell your doctor about any medical condition you have or have had including:

- Kidney disease. It is particularly important that your doctor knows if you have kidney disease and whether you undergo dialysis treatment.
- Allergies to any medicines, including antibiotics.
- Central nervous system disorders, such as localised tremors, or seizures.

### **Children and adolescents (3 months to 17 years of age)**

Experience with INVANZ is limited in children less than two years of age. In this age group your doctor will decide on the potential benefit of its use. There is no experience in children under 3 months of age.

### **Other medicines and INVANZ**

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

Tell your doctor, nurse or pharmacist if you are taking medicines called valproic acid or sodium valproate (used to treat epilepsy, bipolar disorder, migraines, or schizophrenia). This is because INVANZ can affect the way some other medicines work. Your doctor will decide whether you should use INVANZ in combination with these other medicines.

### **Pregnancy and breast-feeding**

If you are pregnant or breast-feeding, think you may be pregnant or are planning to have a baby, ask your doctor for advice before taking this medicine.

INVANZ has not been studied in pregnant women. INVANZ should not be used during pregnancy unless your doctor decides the potential benefit justifies the potential risk to the foetus.

Women who are receiving INVANZ should not breast-feed, because it has been found in human milk and the breast-fed baby may therefore be affected.

### **Driving and using machines**

Do not drive or use any tools or machines until you know how you react to the medicine.

Certain side effects, such as dizziness and sleepiness, have been reported with INVANZ, which may affect some patients' ability to drive or operate machinery.

### **INVANZ contains sodium**

This medicine contains approximately 137 mg sodium (main component of cooking / table salt) in each 1.0 g dose. This is equivalent to 6.85 % of the recommended maximum daily dietary intake of sodium for an adult.

## **3. How to use INVANZ**

INVANZ will always be prepared and given to you intravenously (into a vein) by a doctor or another healthcare professional.

The recommended dose of INVANZ for adults and adolescents 13 years of age and older is 1 gram (g) given once a day. The recommended dose for children 3 months to 12 years of age is 15 mg/kg given twice daily (not to exceed 1 g/day). Your doctor will decide how many days' treatment you need.

For prevention of surgical site infections following surgery of the colon or rectum, the recommended dose of INVANZ is 1 g administered as a single intravenous dose 1 hour before surgery.

It is very important that you continue to receive INVANZ for as long as your doctor prescribes it.

**If you are given more INVANZ than you should**

If you are concerned that you may have been given too much INVANZ, contact your doctor or another healthcare professional immediately.

**If you miss a dose of INVANZ**

If you are concerned that you may have missed a dose, contact your doctor or another healthcare professional immediately.

**4. Possible side effects**

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

***Adults 18 years of age and older:***

Since the drug has been marketed, severe allergic reactions (anaphylaxis), hypersensitivity syndromes (allergic reactions including rash, fever, abnormal blood tests) have been reported. The first signs of a severe allergic reaction may include swelling of the face and/or throat. If these symptoms occur tell your doctor straight away as you may need urgent medical treatment.

Common (may affect up to 1 in 10 people) side effects are:

- Headache
- Diarrhoea, nausea, vomiting
- Rash, itching
- Problems with the vein into which the medicine is given (including inflammation, formation of a lump, swelling at the injection site, or leaking of fluid into the tissue and skin around the injection site)
- Increase in platelet count
- Changes in liver function tests

Uncommon (may affect up to 1 in 100 people) side effects are:

- Dizziness, sleepiness, sleeplessness, confusion, seizure
- Low blood pressure, slow heart rate
- Shortness of breath, sore throat
- Constipation, yeast infection of the mouth, antibiotic-associated diarrhoea, acid regurgitation, dry mouth, indigestion, loss of appetite
- Skin redness
- Vaginal discharge and irritation
- Abdominal pain, fatigue, fungal infection, fever, oedema/swelling, chest pain, abnormal taste
- Changes in some laboratory blood and urine tests

Rare (may affect up to 1 in 1,000 people) side effects are:

- Decrease in white blood cells, decrease in blood platelet count
- Low blood sugar
- Agitation, anxiety, depression, tremor
- Irregular heart rate, increased blood pressure, bleeding, fast heart rate
- Nasal congestion, cough, bleeding from the nose, pneumonia, abnormal breathing sounds, wheezing

- Inflammation of the gall bladder, difficulty in swallowing, faecal incontinence, jaundice, liver disorder
- Inflammation of the skin, fungal infection of the skin, skin peeling, infection of the wound after an operation
- Muscle cramp, shoulder pain
- Urinary tract infection, kidney impairment
- Miscarriage, genital bleeding
- Allergy, feeling unwell, pelvic peritonitis, changes to the white part of the eye, fainting
- The skin may become hard at the site of injection
- Swelling of the skin blood vessels.

Side effects reported with frequency not known (frequency cannot be estimated from the available data) are:

- hallucinations
- decreased consciousness
- altered mental status (including aggression, delirium, disorientation, mental status changes)
- abnormal movements
- muscle weakness
- unsteady walking
- teeth staining

There have also been reports of changes in some laboratory blood tests.

If you experience raised or fluid-filled skin spots over a large area of your body, tell your doctor or nurse straight away.

***Children and adolescents (3 months to 17 years of age):***

Common (may affect up to 1 in 10 people) side effects are:

- Diarrhoea
- Diaper rash
- Pain at the infusion site
- Changes in white blood cell count
- Changes in liver function tests

Uncommon (may affect up to 1 in 100 people) side effects are:

- Headache
- Hot flush, high blood pressure, red or purple, flat, pinhead spots under the skin
- Discoloured faeces, black tar-like faeces
- Skin redness, skin rash
- Burning, itching, redness and warmth at infusion site, redness at injection site
- Increase in platelet count
- Changes in some laboratory blood tests

Side effects reported with frequency not known (frequency cannot be estimated from the available data) are:

- Hallucinations
- Altered mental status (including aggression)

**Reporting of side effects**

If you get any side effects, talk to your doctor, nurse or pharmacist. 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](http://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 INVANZ**

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 container.  
The first 2 numbers indicate the month; the next 4 numbers indicate the year.

Do not store above 25°C.

## **6. Contents of the pack and other information**

### **What INVANZ contains**

The active ingredient of INVANZ is ertapenem 1 g.  
The other ingredients are: sodium bicarbonate (E500) and sodium hydroxide (E524).

### **What INVANZ looks like and contents of the pack**

INVANZ is a white to off-white, freeze-dried powder for concentrate for solution for infusion.  
Solutions of INVANZ range from colourless to pale yellow. Variations of colour within this range do not affect potency.

INVANZ is supplied in packs of 1 vial or 10 vials.  
Not all pack sizes may be marketed.

### **Marketing Authorisation Holder and Manufacturer**

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

**Manufacturer:** FAREVA Mirabel, Route de Marsat, Riom, 63963 Clermont-Ferrand Cedex 9, France

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**The following information is intended for medical or healthcare professionals only:**

Instructions of how to reconstitute and dilute INVANZ:

For single use only.

Preparation for intravenous administration:

**INVANZ must be reconstituted and then diluted prior to administration.**

Adult and adolescents (13 to 17 years of age)

Reconstitution

Reconstitute the contents of a 1 g vial of INVANZ with 10 mL of water for injection or sodium chloride 9 mg/mL (0.9 %) solution to yield a reconstituted solution of approximately 100 mg/mL. Shake well to dissolve.

Dilution

For a 50 mL bag of diluent: For a 1 g dose, immediately transfer contents of the reconstituted vial to a 50 mL bag of sodium chloride 9 mg/mL (0.9 %) solution; or

For a 50 mL vial of diluent: For a 1 g dose, withdraw 10 mL from a 50 mL vial of sodium chloride 9 mg/mL (0.9 %) solution and discard. Transfer the contents of the reconstituted 1 g vial of INVANZ to the 50 mL vial of sodium chloride 9 mg/mL (0.9 %) solution.

Infusion

Infuse over a period of 30 minutes.

Children (3 months to 12 years of age)

Reconstitution

Reconstitute the contents of a 1 g vial of INVANZ with 10 mL of water for injection or sodium chloride 9 mg/mL (0.9 %) solution to yield a reconstituted solution of approximately 100 mg/mL. Shake well to dissolve.

Dilution

For a bag of diluent: Transfer a volume equal to 15 mg/kg of body weight (not to exceed 1 g/day) to a bag of sodium chloride 9 mg/mL (0.9 %) solution for a final concentration of 20 mg/mL or less; or

For a vial of diluent: Transfer a volume equal to 15 mg/kg of body weight (not to exceed 1 g/day) to a vial of sodium chloride 9 mg/mL (0.9 %) solution for a final concentration of 20 mg/mL or less.

Infusion

Infuse over a period of 30 minutes.

The reconstituted solution should be diluted in sodium chloride 9 mg/mL (0.9 %) solution immediately after preparation. Diluted solutions should be used immediately. If not used immediately, in use storage times are the responsibility of the user. Diluted solutions (approximately 20 mg/mL ertapenem) are physically and chemically stable for 6 hours at room temperature (25°C) or for 24 hours at 2 to 8°C (in a refrigerator). Solutions should be used within 4 hours of their removal from the refrigerator. Do not freeze the reconstituted solutions.

The reconstituted solutions should be inspected visually for particulate matter and discoloration prior to administration, whenever the container permits. Solutions of INVANZ range from colourless to pale yellow. Variations of colour within this range do not affect potency.

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

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