

Xefer

Ferric Carboxymaltose INN



Composition

Xefer 100 mg/2 ml Injection: Each 2 ml solution contains Ferric Carboxymaltose INN equivalent to Elemental Iron 100 mg.

Xefer 500 mg/10 ml Injection: Each 10 ml solution contains Ferric Carboxymaltose INN equivalent to Elemental Iron 500 mg.

Xefer 1 g/20 ml Injection: Each 20 ml solution contains Ferric Carboxymaltose INN equivalent to Elemental Iron 1g.

Description

Xefer is an antianemic preparation, a medicine that is used to treat anemia. It contains Iron in the form of an iron carbohydrate. Iron is an essential element required for oxygen-carrying capacity of hemoglobin in red blood cells and of myoglobin in muscle tissue. Moreover, iron is involved in many other functions necessary for maintenance of life in the human body. Xefer also used for the treatment of iron deficiency, when oral preparations are ineffective or cannot be used.

Clinical Pharmacology

Xefer solution for injection/infusion contains iron in a stable ferric state as a complex of a polynuclear iron-hydroxide core with a carbohydrate ligand. The complex is designed to provide, in a controlled way, utilizable iron for the iron transport and storage proteins in the body (transferrin and ferritin, respectively). Clinical studies showed that the hematological response and the filling of the iron stores were faster after intravenous administration of Xefer than with orally administered comparators. Xefer was rapidly eliminated from the blood, transferred to the bone marrow and deposited in the liver and spleen.

Indications

Xefer is indicated for the treatment of Iron Deficiency Anemia (IDA) in adult patients who have:

- ♦ Intolerance to oral iron or unsatisfactory response to oral iron
- ♦ Non-dialysis-dependent chronic kidney disease (NDD-CKD)

Dosage and Administration

Determination of iron need

| Hb | Patient body weight | | |
|----------|---------------------|-----------------|----------------|
| | below 35 kg | 35 kg to <70 kg | 70 kg and over |
| g/dL | | | |
| <10 | 500 mg | 1,500 mg | 2,000 mg |
| 10 to 14 | 500 mg | 1,000 mg | 1,500 mg |
| >14 | 500 mg | 500 mg | 500 mg |

Maximum tolerated single dose

A single dose of Xefer should not exceed 1000 mg of iron (20 ml) per day. Do not administer 1000 mg of iron (20 ml) more than once a week.

Intravenous injection

Xefer may be administered by intravenous injection using undiluted solution up to 1000 mg iron (up to a maximum of 15 mg/kg body weight). For doses greater than 200 and up to 500 mg iron, Xefer should be administered at a rate of 100 mg/min. For doses greater than 500 and up to 1000mg iron, Xefer should be administered over 15 minutes.

Intravenous drip infusion

Xefer may be administered by intravenous infusion up to a maximum single dose of 1000mg of iron (up to a maximum of 20 mg/kg body weight).

Method of administration

Xefer must be administered only by the intravenous route: by bolus injection, or during a haemodialysis session undiluted directly into the venous limb of the dialyzer, or by drip infusion. In case of drip infusion **Xefer** must be diluted only in Salnor (sterile 0.9% w/v sodium chloride) as follows:

Dilution plan of Ferric carboxymaltose for intravenous infusion

| Volume of Ferric Carboxymaltose required | Equivalent iron dose | Maximum amount of sterile 0.9% m/v sodium chloride solution | Minimum administration time |
|--|----------------------|---|-----------------------------|
| 2 - 4 ml | 100 - 200 mg | 50 ml | - |
| >4 - 10 ml | >200 - 500 mg | 100 ml | 6 minutes |
| >10 - 20 ml | >500 - 1000 mg | 250 ml | 15 minutes |

Note. For stability reasons, dilutions to concentrations less than 2 mg iron/ml are not permissible. **Xefer must not be administered by the subcutaneous or intramuscular route.**

Haemodialysis-dependent chronic kidney disease

A single maximum daily injection dose of 200 mg iron should not be exceeded in haemodialysis dependent chronic kidney disease patients

Contraindications

The use is contraindicated in cases of:

- ♦ known hypersensitivity to any of its excipients
- ♦ anemia not attributed to iron deficiency, e.g. other microcytic anemia
- ♦ evidence of iron overload or disturbances in utilization of iron

Precautions

Parenterally administered iron preparations can cause hypersensitivity reactions including anaphylactic reactions, which may be potentially fatal. Therefore, facilities for cardiac-pulmonary resuscitation must be available. If allergic reactions or signs of intolerance occur during administration, the treatment must be stopped immediately. Xefer have to be used immediately after opening and mixing saline.

Case to be avoided

Parenteral iron administration should be avoided in patients with hepatic dysfunction where iron overload is a precipitating factor, in particular Porphyria Cutanea Tarda (PCT).

Drug Interactions

As with all parenteral iron preparations the absorption of oral iron is reduced when administered concomitantly. Therefore, if required, oral iron therapy should not be started for at least 5 days after the last injection of Xefer.

Use in pregnancy & lactation

Pregnancy Category C. Adequate and well controlled studies in pregnant women have not been conducted. However, animal reproduction studies have been conducted with ferric carboxymaltose. In these studies, administration of ferric carboxymaltose to rabbits during the period of organogenesis caused fetal malformations and increased implantation loss at maternally 5 toxic doses of approximately 12% to 23% of the human weekly dose of 750 mg (based on body surface area). Clinical studies showed that transfer of iron from Xefer to human milk was negligible (<1%). Based on limited data on nursing women it is unlikely that Xefer represents a risk to the nursing child.

Side Effects

Headache is the most common adverse drug reaction that can be noticed in 3.3% of patient. Others common side effects are hypertension, hypotension, constipation, diarrhea, vomiting, dyspepsia, flatulence, hypersensitivity, pruritus, urticaria, myalgia, back pain, arthralgia, pyrexia, fatigue, chest pain, peripheral, edema, anaphylactic reactions, loss of consciousness, anxiety, syncope, bronchospasm & influenza like illness.

Overdose

Administration of Xefer in quantities exceeding the amount needed to correct iron deficit at the time of administration may lead to accumulation of iron in storage sites eventually leading to haemosiderosis. Monitoring of iron parameters such as serum ferritin and transferrin saturation may assist in recognising iron accumulation. If iron accumulation has occurred, the use of an iron chelator may be considered.

Storage

Store in the original package. Do not store above 30°C. Do not freeze. Keep away from light. Keep away from children.

Packaging

Xefer 100mg/2 ml Injection: Each box contains 1 vial of 2 ml Ferric Carboxymaltose solution with 50 ml Salnor, an infusion set, an alcohol pad, 3 ml sterile disposable syringe with needle and first aid bandage.

Xefer 500 mg/10 ml Injection: Each box contains 1 vial of 10 ml Ferric Carboxymaltose solution with 100 ml Salnor, an infusion set, an alcohol pad, 10 ml sterile disposable syringe with needle and first aid bandage.

Xefer 1 g/20 ml Injection: Each box contains 1 vial of 20 ml Ferric Carboxymaltose solution with 250 ml normal saline, an infusion set, an alcohol pad, 20 ml sterile disposable syringe with needle and first aid bandage.

Manufactured by

**ZISKA
PHARMA**

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