

INROSE[®] 100mg/5mL

(Iron Sucrose)
IV Injection

QUALITATIVE AND QUANTITATIVE COMPOSITION:

INROSE Injection U.S.P. 100mg/5mL

Each 5mL contains: Iron sucrose eq. to Elemental Iron...100mg

DESCRIPTION:

INROSE injection is a brown, sterile, solution aqueous, complex of polynuclear Iron (III)-hydroxide in sucrose for intravenous use.

CLINICAL PHARMACOLOGY:

Pharmacokinetics: Absorption: In intravenous doses of iron sucrose, its iron component exhibits first order kinetics with an elimination half-life of 6 hours, total clearance of 1.2L/hr, non-steady state apparent volume of distribution of 10L and steady state apparent volume of distribution of 7.9L. Since iron disappearance from serum depends on the need for iron in the iron stores and iron utilizing tissues of the body, Serum clearance of iron is expected to be more rapid in iron deficient patients treated with iron sucrose as compared to healthy individuals.

Distribution: In intravenous doses of iron sucrose, its iron component appears to distribute mainly in blood and to some extent in extravascular fluid, the volume of distribution at steady state is about 8L, indicating a low iron distribution in the body fluid.

Metabolism & Excretion: Following intravenous administration, iron sucrose is dissociated into iron and sucrose by the reticuloendothelial system, Renal elimination of iron occurring in the first 4 hours after injection correspond to less than 5% of the total body clearance. After 24 hours the plasma levels of iron were reduced to the pre-dose level and about 75% of the dosage of sucrose was excreted.

THERAPEUTIC INDICATIONS:

INROSE (Iron sucrose) is indicated for the treatment of iron deficiency in the following:

- Where there is a clinical need to deliver iron rapidly to iron stores.
- Patients who can not tolerate oral iron therapy or who are non-compliant.
- In active inflammatory bowel disease where oral iron preparations are ineffective.
- Non-dialysis dependent-chronic kidney diseases (NDD-CKD) patients receiving an Erythropoietin.
- Non-dialysis dependent-chronic kidney diseases (NDD-CKD) patients not receiving an Erythropoietin.
- Hemodialysis dependent-chronic kidney disease (HDD-CKD) patients receiving an Erythropoietin.
- Peritoneal dialysis dependent-chronic kidney disease (HDD-CKD) patients receiving an Erythropoietin.

DOSAGE AND ADMINISTRATION:

Mode of Administration: Administer Iron Sucrose only intravenously by slow injection or by infusion. The dosage of

Iron Sucrose is expressed in mg of elemental iron. Each mL contains 20 mg of elemental iron.

Adult Patients with Hemodialysis Dependent-Chronic Kidney Disease (HDD-CKD): Administer Iron Sucrose 100 mg undiluted as a slow intravenous injection over 2 to 5 minutes, or as an infusion of 100 mg diluted in a maximum of 100 mL of 0.9% NaCl over a period of at least 15 minutes, per consecutive hemodialysis session. Administer Iron Sucrose early during the dialysis session (generally within the first hour). The usual total treatment course of Iron Sucrose is 1000 mg. Iron Sucrose treatment may be repeated if iron deficiency reoccurs.

Adult Patients with Non-Dialysis Dependent-Chronic Kidney Disease (NDD-CKD): Administer Iron sucrose 200 mg undiluted as a slow intravenous injection over 2 to 5 minutes or as an infusion of 200 mg in a maximum of 100 mL of 0.9% NaCl over a period of 15 minutes. Administer on 5 different occasions over a 14 day period. There is limited experience with administration of an infusion of 500 mg of Iron sucrose, diluted in a maximum of 250 mL of 0.9% NaCl, over a period of 3.5 to 4 hours on Day 1 and Day 14. Iron Sucrose treatment may be repeated if iron deficiency reoccurs.

Adult Patients with Peritoneal Dialysis Dependent-Chronic Kidney Disease (PDD-CKD): Administer Iron Sucrose in 3 divided doses, given by slow intravenous infusion, within a 28 day period: 2 infusions each of 300 mg over 1.5 hours 14 days apart followed by one 400 mg infusion over 2.5 hours 14 days later. Dilute Iron Sucrose in a maximum of 250 mL of 0.9% NaCl. Iron Sucrose treatment may be repeated if iron deficiency reoccurs.

Pediatric Patients (2 Years of Age and Older) with HDD-CKD for Iron Maintenance Treatment: For iron maintenance treatment: Administer Iron Sucrose at a dose of 0.5 mg/kg, not to exceed 100 mg per dose, every two weeks for 12 weeks given undiluted by slow intravenous injection over 5 minutes or diluted in 0.9% NaCl at a concentration of 1 to 2 mg/mL and administered over 5 to 60 minutes. Do not dilute to concentrations below 1 mg/mL. Iron Sucrose treatment may be repeated if necessary.

The dosing for iron replacement treatment in pediatric patients with HDD-CKD has not been established: Pediatric Patients (2 Years of Age and Older) with NDD-CKD or PDD-CKD who are on Erythropoietin Therapy for Iron Maintenance Treatment.

For iron maintenance treatment: Administer Iron Sucrose at a dose of 0.5 mg/kg, not to exceed 100 mg per dose, every four weeks for 12 weeks given undiluted by slow intravenous injection over 5 minutes or diluted in 0.9% NaCl at a concentration of 1 to 2 mg/mL and administered over 5 to 60 minutes. Do not dilute to concentrations below 1 mg/mL. Iron Sucrose treatment may be repeated if necessary.

ADVERSE REACTIONS:

Following adverse drug reactions have been reported:
Common: Transient taste perversions (in particular metallic taste): Uncommon: headache, dizziness, hypotension and collapse, tachycardia palpitations, bronchospasm dyspnea, nausea, vomiting, abdominal pain, diarrhea pruritus, urticaria, rash exanthema, erythema, muscle cramps, myalgia, fever, shivering, flushing, chest pain and tightness. Injection site disorders such as superficial phlebitis, burning, swelling.

Rare: paresthesia, anaphylactoid reactions (rarely involving arthralgia), peripheral edema, fatigue, asthenia, malaise. Isolated cases: reduced level of consciousness, light-headed feeling, confusion angioedema, swelling of joint. Hyperhidrosis and back pain.

Hemodialysis dependent-chronic kidney disease (HDD-CKD) patients: Hypotension, muscle cramps, nausea, headache, graft complications, vomiting, dizziness, hypertension, chest pain and diarrhea.

Non-dialysis dependent-chronic kidney disease (NDD-CKD) Patients: Dysgeusia, peripheral edema, diarrhea, constipation, nausea, dizziness and hypertension. Patients receiving erythropoietin may experience: diarrhea, edema, nausea, vomiting, arthralgia, back pain, headache, hypertension, dysgeusia, dizziness, extremity pain and injection site burning.

Peritoneal dialysis dependent-chronic kidney disease (PDD-CKD) Patients: diarrhea, peritoneal infection, vomiting, hypertension, pharyngitis, peripheral edema and nausea.

CONTRAINDICATION:

The use of iron sucrose is contra-indicated in cases of :

- Known hypersensitivity to iron sucrose or any of its components.
- Anemias not attributable to iron deficiency.
- Iron overload or disturbances in utilization of iron.
- Patients with history of asthma, eczema or other atopic allergy, because they are more susceptible to experience allergic reaction.
- Pregnancy first trimester.

WARNINGS AND PRECAUTIONS

Hypersensitivity Reactions: Serious hypersensitivity reactions, including anaphylactic-type reactions, some of which have been life-threatening and fatal, have been reported in patients receiving Iron Sucrose. Patients may present with shock, clinically significant hypotension, loss of consciousness, and/or collapse. If hypersensitivity reactions or signs of intolerance occur during administration, stop Iron Sucrose immediately. Monitor patients for signs and symptoms of hypersensitivity during and after Iron Sucrose administration for at least 30 minutes and until clinically stable following completion of the infusion. Only administer Iron Sucrose when personnel and therapies are immediately available for the treatment of serious hypersensitivity reactions. Most reactions associated with intravenous iron preparations occur within 30 minutes of the completion of the infusion.

Hypotension: Iron Sucrose may cause clinically significant hypotension. Monitor for signs and symptoms of hypotension following each administration of INROSE. Hypotension following administration of Iron Sucrose may be related to the rate of administration and/or total dose administered.

Iron Overload: Excessive therapy with parenteral iron can lead to excess storage of iron with the possibility of iatrogenic hemosiderosis. All adult and pediatric patients receiving Iron Sucrose require periodic monitoring of hematologic and iron parameters (hemoglobin, hematocrit, serum ferritin and transferrin saturation). Do not administer INROSE to patients with evidence of iron overload. Transferrin saturation (TSAT) values increase rapidly after intravenous administration of iron sucrose; do not perform serum iron measurements for at least 48 hours after intravenous dosing

USE AND SPECIFIC POPULATION:

Pregnancy category B: INROSE (Iron Sucrose) should be used in pregnancy only if the potential benefit justifies the potential risk to mother and fetus.

Nursing Mothers: It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk caution should be exercised when iron sucrose is administered to a nursing woman.

Pediatric Use: Safety and effectiveness of INROSE for iron replacement treatment in pediatric patients with dialysis-dependent or non-dialysis-dependent CKD have not been established.

Geriatric Use: Dose administration to an elderly patient should be cautious, reflecting the greater frequency of decreased hepatic, renal, or cardiac function, and of concomitant disease or other drug therapy.

DRUG INTERACTIONS:

As with all parenteral iron preparations, iron sucrose should not be administered concomitantly with oral iron preparations since the absorption of oral iron is reduced. Therefore, oral iron therapy should be started at least 5 days after the last injection of Iron Sucrose.

OVERDOSAGE:

Overdosage can cause acute iron overloading which may manifest itself as hemosiderosis. Overdosage should be treated with supportive measures and, if required, with an iron chelating agent.

INSTRUCTIONS:

Dosage as directed by the physician. Store below 30°C. Protect from light and avoid freezing. Keep all medicines out of the reach of children. When administered by Intravenous Infusion, the injection must be diluted with 0.9% Sodium Chloride injection to a concentration of 1.0 - 2.0mg/mL of Elemental Iron.

The Osmolarity of the injection is 1,250 mOsmol/L.

Acceptance criteria: 1150-1350 mOsmol/L

PRESENTATION:

INROSE Injection 100mg/5mL is available in 5mLx5 ampoules with leaflet.

Manufactured by:

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