IRON CORNER

IV Iron Table

	Iron Dextran	Iron Sucrose	Ferric Gluconate	Ferumoxytol	Ferric Carboxymaltose
Trade Name(s)	InFeD (Sanofi Aventis)	Venofer (American Regent Inc)	Ferrlecit (Sanofi Aventis US)	Feraheme (AMAG Pharmaceuticals)	Injectafer (American Regent Inc)
FDA Approved Indication	Iron deficiency in patients whom oral administration is unsatisfactory or impossible.	Iron deficiency anemia in adult and pediatric patients with chronic kidney disease (CKD).	Iron deficiency anemia in adult and pediatric patients with chronic kidney disease (CKD) receiving hemodialysis who are receiving supplemental EPO therapy	Iron deficiency anemia in adult patients with chronic kidney disease (CKD).	Iron deficiency anemia in adult patients who have intolerance to oral iron or have had unsatisfactory response to oral iron; or who have non-dialysis dependent chronic kidney disease.
Black Box Warning	Yes	No	No	No	No
Route of Administration	IV injection IV infusion IM injection (not recommended)	IV injection IV infusion	IV injection IV infusion	IV injection IV infusion	IV injection IV infusion
Maximum FDA Approved Single Dose	100mg	400 mg	125mg	510 mg	750 mg
Dosing	Doses less than or equal to 300 mg, slow IV push at a rate not to exceed 50 mg/minute; or diluted in 100-250 ml normal saline. For administration of a 1000mg total dose infusion, the total calculated dose should be diluted in 500 ml (range of 250 to 1000 ml) of normal saline. After a test infusion, the solution may be infused over 1 or more hours.	100mg IVP over 2-5 minutes; 100 mg/ 100ml 0.9% NS over 15 minutes; 200mg / 250ml 0.9%NS over 2 - 4 hours for a TDI of 1,000mg over a 14-day period 300 mg/ 250ml 0.9% NS infusion over 1.5 hours 400 mg/ 250ml 0.9% NS infusion over 2.5 hours If more than 600mg is needed for iron repletion, a transferrin saturation and serum iron levels should be drawn 72 hours after the completion weekly dose to assist in recognition of iron accumulation. Do not continue infusions unless TSAT% is less than 40%	Administer 125 mg diluted in 100 ml normal saline over 60 minutes daily for 5 doses maximum per week. May need to continue to a cumulative dose of 1 gram. Transferrin saturation and serum iron levels should be drawn 48 hours after the completion of the third dose to assist in recognition of iron accumulation. Do not continue daily infusions of Ferrlecit unless the transferrin saturation is less than 40%.	Up to 510mg IV push in 17 seconds. However, due to free iron with the rapid infusion, it is recommended that the 17 ml injection be given in 60-90 seconds. A total dose infusion of 1020mg in 100mL NS over 15 minutes has been successfully administered in clinical trials. Observe patients for signs and symptoms of hypersensitivity during and after administration for at least 30 minutes and until clinically stable.	Up to 750 mg can be delivered in a single dose. Give 2 doses separated by at least 7 days for a total cumulative dose of up to 1500 mg per course[1] Administer intravenously by • Infusion over at least 15 minutes • Slow push injection at the rate of approximately 100 mg (2 mL) per minute over at least 7.5 minutes For patients weighing less than 50 kg (110 lb), give each dose as 15 mg/kg body weight. When administered via infusion, dilute up to 750 mg of iron in no more than 250 mL of sterile 0.9% sodium chloride injection, USP, such that the concentration of the infusion is not <2 mg of iron per mL and administer over at least 15 minutes. When administering as a slow intravenous push, give at the rate of approximately 100 mg (2 mL) per minute. A total dose infusion of 1000mg in 250mL NS over 15 minutes has been successfully administered in clinical trials.

Pediatric Indication	Yes > 4 months of age	Yes 6-15 years of age	Yes >2 years of age	No	No
Pediatric Dosing	*Greater than 10 Kg:* Administer 100 mg iron dextran IV per day until total calculated dose is given. *5-10 Kg:* Administer 50 mg iron dextran IV per day until the total calculated dose is given. *Infants greater than 4 months but less than 5 Kg:* Administer 25 mg iron dextran IV per day until the total calculated dose is given	0.12 mL/kg (1.5 mg/kg of elemental iron) diluted in 25 mL 0.9% sodium chloride and administered by intravenous infusion over 1 hour per dialysis session.	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 25 mL of 0.9% NaCl and administered over 5 to 60 minutes.	N/A	N/A
Pregnancy Category	Category C	Category B	Category B	Category C	Category C
Lactating Women	Traces of unmetabolized iron dextran are excreted in human milk.	It is not known whether iron sucrose is excreted in human milk.	It is not known whether Ferric gluconate is excreted in human milk. Benzyl alcohol present in maternal serum is likely to cross into human milk and may be orally absorbed by a nursing infant.	It is not known whether ferumoxytol is present in human milk.	Mean breast milk iron levels were higher in lactating women receiving ferric carboxymaltose than in lactating women receiving oral ferrous sulfate.

References

DexFerrum [package insert]. Shirley, NY: American Regent; 2008.
InFeD [package insert]. Morristown, NJ: Watson Pharma; 2009
Venofer [package insert]. Shirley, NY, American Regent; 2012.
Ferrlecit [package insert]. Bridgewater, NJ: Sanofi Aventis US; 2011.
Feraheme [package insert], Lexington, MA: AMAG Pharmaceuticals; 2012.
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