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Prior Authorization DRUG Guidelines

**INFeD® (iron dextran)**

Effective Date: 10/23/12

Date Developed: 10/15/12 by Albert Reeves MD

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**INFeD®** is a Hematinic . The released iron, from the plasma, eventually replenishes the depleted iron stores in the bone marrow where it is incorporated into hemoglobin

**Pre-Authorization Criteria:**

Iron deficiency in adult and pediatric patients  $\geq 4$  months of age with intolerance to oral iron or unsatisfactory response to oral iron after trying at least two different forms (e.g. sulfate, gluconate, fumarate, carbonate)

**NOTE:** There are various forms of iron for parenteral use, each with individual dosing regimens. The VCHCP formulary is restricted to Infed, Injectafer, Ferrlecit and Ferheme.

**NOTE:** The Institute for Safe Medication Practices (ISMP) includes this medication among its list of drugs which have a heightened risk of causing significant patient harm when used in error.

**Dosing: Adult**

**NOTE:** Maximum cumulative dose is restricted to 1000 mg per 30 days

**Iron-deficiency anemia:** I.M. (INFeD®), I.V., INFeD®):

Dose (mL) =  $0.0442 (\text{desired Hgb} - \text{observed Hgb}) \times \text{LBW} + (0.26 \times \text{LBW})$  Desired

hemoglobin: Usually 14.8 g/dL

LBW = Lean body weight in kg

**Iron replacement therapy for blood loss:** (INFeD®), I.V. (INFeD®):

Replacement iron (mg) = blood loss (mL) x Hct

**Maximum daily dosage:** Daily dosages should be limited to 100 mg iron (2 mL)

**Total dose infusion (unlabeled):** The entire dose (estimated iron deficit) may be diluted and administered as a one-time I.V. infusion.

**Cancer-/chemotherapy-associated anemia I.V.:** Test dose: 25 mg slow I.V. slow push, followed 1 hour later by 100 mg over 5 minutes; larger doses up to total dose infusion (over several hours) may be administered. Low-molecular-weight iron dextran preferred.

### **Dosing: Pediatric**

**Iron-deficiency anemia:** I.M. (INFeD®), I.V. INFeD®):

Children 5-15 kg: Should not normally be given in the first 4 months of life: Dose

(mL) = 0.0442 (desired Hgb - observed Hgb) x W + (0.26 x W)

Desired hemoglobin: Usually 12 g/dL W =

Total body weight in kg

Children >15 kg: Refer to adult dosing.

**Iron replacement therapy for blood loss:** Refer to adult dosing.

*Maximum daily dose:*

Children <5 kg: 25 mg iron (0.5 mL)

Children 5-10 kg: 50 mg iron (1 mL) Children

≥10 kg: Refer to adult dosing.

## **DOSAGE FORMS AND STRENGTHS**

Injection, solution:

INFeD®: Elemental iron 50 mg/mL (2 mL) [low-molecular-weight iron dextran]

## **PRECAUTIONS**

**I.M.** (INFeD®): Use Z-track technique (displacement of the skin laterally prior to injection); injection should be deep into the upper outer quadrant of buttock; alternate buttocks with subsequent injections. Administer test dose at same recommended site using the same technique.

**I.V.** Test dose should be given gradually over at least 30 seconds (INFeD®).

Subsequent dose(s) may be administered by I.V. bolus undiluted at a rate not to exceed 50 mg/minute or diluted in 250-1000 mL NS and infused over 1-6 hours (initial 25 mL should be given slowly and patient should be observed for allergic reactions); avoid dilutions with dextrose (increased incidence of local pain and phlebitis)

- **Delayed reaction:** Delayed (1-2 days) infusion reaction (including arthralgia, back pain, chills, dizziness, and fever) may occur with large doses (eg, total dose infusion) of I.V. iron dextran; usually subsides within 3-4 days. May also occur (less commonly) with I.M. administration; subsiding within 3-7 days.

- **Hypersensitivity/anaphylactoid reactions:**

- **[U.S. Boxed Warning]:**

- Deaths associated with parenteral administration following anaphylactic-type reactions have been reported (use only where resuscitation equipment and personnel are available). A test dose should be administered to all patients prior to the first therapeutic dose. Anaphylactic and other hypersensitivity reactions have occurred

**even in patients who tolerated the test dose.. A history of drug allergy (including multiple drug allergies) and/or the concomitant use of an ACE inhibitor may increase the risk of anaphylactic-type reactions.**

## REFERENCES

1. Auerbach M, Ballard H, Trout JR, et al, "Intravenous Iron Optimizes the Response to Recombinant Human Erythropoietin in Cancer Patients With Chemotherapy-Associated Anemia: A Multicenter, Open-Label, Randomized Trial," *J Clin Oncol*, 2004, 22(7):1301-7. [PubMed 15051778]
2. Auerbach M, Witt D, and Toler W, "Clinical Use of the Total Dose Intravenous Infusion of Iron Dextran," *J Lab Clin Med*, 1988, 111(5):566- 70. [PubMed 3361236]
3. Benito RP and Guerrero TC, "Response to a Single Intravenous Dose Versus Multiple Intramuscular Administration of Iron Dextran Complex: A Comparative Study," *Curr Ther Res Clin Exp*, 1973, 15(7):373-82. [PubMed 4198298]
4. Chertow GM, Mason PD, Vaage-Nilsen O, et al, "Update on Adverse Drug Events Associated With Parenteral Iron," *Nephrol Dial Transplant*, 2006, 21(2):378-82. [PubMed 16286429]
5. Lipschitz DA, "The Anemia of Chronic Disease," *J Am Geriatr Soc*, 1990, 38(11):1258-64. [PubMed 2123218]
6. National Comprehensive Cancer Network® (NCCN), "Practice Guidelines in Oncology™: Cancer- and Chemotherapy-Induced Anemia Version 2.2010." Available at [http://www.nccn.org/professionals/physician\\_gls/PDF/anemia.pdf](http://www.nccn.org/professionals/physician_gls/PDF/anemia.pdf)
7. National Kidney Foundation, "KDOQI Clinical Practice Guidelines and Clinical Practice Recommendations for Anemia in Chronic Kidney Disease," *Am J Kidney Dis*, 2007, 50(3):529-30. Available at [http://www.kidney.org/professionals/KDOQI/guidelines\\_anemiaUP/index.htm](http://www.kidney.org/professionals/KDOQI/guidelines_anemiaUP/index.htm) or <http://www.kidney.org/professionals/KDOQI>

8. Rizzo JD, Somerfield MR, Hagerty LK, et al, "American Society of Hematology/American Society of Clinical Oncology 2007 Clinical Practice Guideline Update on the Use of Epoetin and Darbepoetin," *Blood*, 2008, 111(1):25-41. [PubMed [17954703](#)]
9. INFeD (iron dextran complex) [prescribing information]. Madison, NJ: Allergan USA Inc; April 2021.
10. Pavord S, Daru J, Prasannan N, Robinson S, Stanworth S, Girling J; BSH Committee. UK guidelines on the management of iron deficiency in pregnancy. *Br J Haematol*. 2020;188(6):819-830. doi:10.1111/bjh.16221
11. Darwish AM, Khalifa EE, Rashad E, Farghally E. Total dose iron dextran infusion versus oral iron for treating iron deficiency anemia in pregnant women: a randomized controlled trial. *J Matern Fetal Neonatal Med*. 2019;32(3):398-403.
12. FIGO Working Group on Good Clinical Practice in Maternal-Fetal Medicine. Good clinical practice advice: iron deficiency anemia in pregnancy. *Int J Gynaecol Obstet*. 2019;144(3):322-324.

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