

INTRAVENOUS IRON THERAPY (Venofer[®] or Feraheme[®] or Iron Dextran)

INDICATIONS & CRITERIA FOR USE

Intravenous iron may be used to treat iron deficiency defined as:

1. Hb < 110 AND either of 2 or 3 below
2. Ferritin < 30; OR
3. Ferritin < 200 AND iron saturation < 20%

Venofer[®] dosage: Usually 300 mg in 250mL NS by IV infusion over 2 h. If weight < 50 kg (110 lb), consider a 200 mg dose to reduce infusion-related side effects.

Feraheme[®] dosage: 510 mg diluted in 50 mL NS by IV infusion over 15 min

Iron Dextran dosage: The initial infusion requires a test dose of 25mg administered over 15 minutes with physician in the patient care area for the first 30 minutes of the infusion. If test dose is tolerated, then administer dose (500mg -1000mg) diluted in 250-1000 mL over 2-6 hours. Subsequent infusions may include Total Dose Infusion (TDI) (see [Iron Dextran IV Drug Monograph](#))

Indications & Criteria for Use	Venofer [®] Regimen	Feraheme [®] Regimen
Inadequate response to an adequate trial of oral iron*	1 dose and reassess in 4 weeks	1 dose and reassess in 4 weeks
Nephrology: inadequate response to an adequate trial of oral iron *	300 mg IV weekly x 3 doses	510 mg weekly x 2 doses
Inability to absorb oral iron resulting in severe iron deficiency (ferritin < 30) caused by GI disease (celiac) or surgery (gastrectomy) (maintain ferritin > 50 with IV iron)	Typically 1 dose per month	Typically 1 dose per month
Severe intolerance to oral iron (vomiting and/or diarrhea)	1 dose and reassess in 4 weeks	1 dose and reassess in 4 weeks
Chronic GI bleeding with inadequate response to an adequate trial of oral iron* and GI interventions (as needed to maintain hemoglobin > 110 g/L)	Typically 1 dose per month. Titrate to lowest possible frequency	Typically 1 dose per month. Titrate to lowest possible frequency
Rapid correction of anemia in patients with severe symptomatic iron deficiency anemia (Hb < 90 g/L) in whom avoidance of RBC transfusion is important	1 dose and reassess in 4 weeks	1 dose and reassess in 4 weeks
During chemotherapy or radiation therapy for cancer	Hb 90-109 g/L – 1 dose Hb < 90 g/L – 2 doses given 2-4 weeks apart	Hb 90-109 g/L – 1 dose Hb < 90 g/L – 2 doses given 3-7 days apart
Preoperative iron deficiency anemia before elective high blood loss surgery	Hb <130 g/L – 1 dose Hb < 110 g/L – 2 doses given 1-2 weeks apart	Hb <130 g/L – 1 dose Hb < 110 g/L – 2 doses given 3-7 days apart

* An adequate trial of oral iron therapy consists of the following:

- Duration of 3 months
- Adequate dose – 200 mg/day of elemental iron given as ferrous fumarate 300 mg po BID; if not tolerated, consider Proferrin (heme iron polypeptide) 11 mg po BID
- Vitamin C to enhance iron absorption – 500 mg with each dose of iron
- Optimal time of administration: on an empty stomach (1 hr before breakfast and at bedtime)