

Effective 1.1.2022 ST will target Feraheme, Injectafer and Monoferric. Will require documentation of trial and failure of Ferlecit, INFeD, and Venofer

FDA APPROVED INDICATIONS AND DOSAGE^{1-3,5-7}

Agent(s)	Indication(s)	Dosage
<p>Feraheme^{®a} (ferumoxytol)</p> <p>Injection for intravenous use</p>	<p>Treatment of iron deficiency anemia (IDA) in adult patients who:</p> <ul style="list-style-type: none"> • Have intolerance to oral iron or have had unsatisfactory response to oral iron • Have chronic kidney disease (CKD) 	<p>The recommended dose of Feraheme is an initial 510 mg IV followed by a second 510 mg dose IV 3 to 8 days later</p>
<p>Ferlecit (sodium ferric gluconate complex in sucrose)^a</p> <p>Injection for intravenous use</p>	<p>Treatment of iron deficiency anemia in adult patients and in pediatric patients age 6 years and older with chronic kidney disease receiving hemodialysis who are receiving supplemental epoetin therapy</p>	<p>Adult Patients: The recommended adult dosage is 10 mL (125 mg of elemental iron) diluted in 100 mL of 0.9% sodium chloride administered by intravenous infusion over 1 hour per dialysis session or undiluted as a slow intravenous injection (at a rate of up to 12.5 mg/min) per dialysis session</p> <p>Pediatric Patients: The recommended pediatric dosage is 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</p>
<p>INFeD (iron dextran)</p> <p>Injection for intravenous use</p>	<p>Treatment of adult and pediatric patients of age 4 months and older with documented iron deficiency who have intolerance to oral iron or an unsatisfactory response to oral iron</p>	<p>Adults and Children over 15 kg (33 lbs): Dose (mL) = 0.0442 (Desired Hb - Observed Hb) x LBW + (0.26 x LBW)</p> <p>Children 5 to 15 kg (11 to 33 lbs) : Dose (mL) = 0.0442 (Desired Hb - Observed Hb) x W + (0.26 x W)</p>

Agent(s)	Indication(s)	Dosage
<p>Injectafer® (ferric carboxymaltose)</p> <p>Injection for intravenous use</p>	<p>Treatment of iron deficiency anemia in adult patients who:</p> <ul style="list-style-type: none"> • Have intolerance to oral iron or have had unsatisfactory response to oral iron • Have non-dialysis dependent chronic kidney disease 	<p>Patients weighing less than 50 kg: Give Injectafer in two doses separated by at least 7 days and give each dose as 15mg/kg of body weight.</p> <p>Patients weighing 50 kg or more: Give Injectafer in two doses separated by at least 7 days. Give each dose as 750 mg for a total cumulative dose of 1500 mg of iron per course</p>
<p>Monoferric® (ferric derisomaltose)</p> <p>Injection for intravenous use</p>	<p>Treatment of iron deficiency anemia in adult patients who:</p> <ul style="list-style-type: none"> • Have intolerance to oral iron or have had unsatisfactory response to oral iron • Have non-hemodialysis dependent chronic kidney disease 	<p>Patients weighing less than 50 kg: 20 mg/kg actual body weight by IV infusion over at least 20 minutes as a single dose. Repeat dose if iron deficiency anemia reoccurs</p> <p>Patients weighing 50 kg or more: 1,000 mg by IV infusion over at least 20 minutes as a single dose. Repeat dose if iron deficiency anemia reoccurs</p>

Agent(s)	Indication(s)	Dosage
Venofer (iron sucrose)	Treatment of iron deficiency anemia (IDA) in patients with chronic kidney disease.	<p>Adults with Hemodialysis Dependent-Chronic Kidney Disease (HDD-CKD): 100 mg slow IV injection or infusion</p> <p>Adults with Non-Dialysis Dependent-Chronic Kidney Disease (NDD-CKD): 200 mg slow IV injection or infusion</p> <p>Adults with Peritoneal Dialysis Dependent-Chronic Kidney Disease (PDD-CKD): 300 mg or 400 mg IV infusion</p> <p>Pediatrics with HDD-CKD, PDD-CKD, NDD-CKD: 0.5 mg/kg slow IV injection or infusion</p>

a- generic equivalent available
 LBW – lean body weight in kg

CLINICAL RATIONALE

Iron deficiency anemia⁴

Iron deficiency is the most common nutritional disorder worldwide and accounts for approximately one-half of anemia cases. The diagnosis of iron deficiency anemia is confirmed by the findings of low iron stores and a hemoglobin level two standard deviations below normal for age and sex. Women should be screened during pregnancy, and children screened at one year of age. Supplemental iron may be given initially, followed by further workup if the patient is not responsive to therapy. Men and postmenopausal women should not be screened but should be evaluated with gastrointestinal (GI) endoscopy if diagnosed with iron deficiency anemia. The underlying cause should be treated, and oral iron therapy can be initiated to replenish iron stores. Parenteral therapy may be used in patients who cannot tolerate or absorb oral preparations.

Iron deficiency anemia is diminished red blood cell production due to low iron stores in the body. It is the most common nutritional disorder worldwide and accounts for approximately one-half of anemia cases. Iron deficiency anemia can result from inadequate iron intake, decreased iron absorption, increased iron demand, and increased iron loss. Identifying the underlying etiology and administering the appropriate therapy are keys to the evaluation and management of this condition.

The evaluation for iron deficiency anemia should begin with a thorough history and physical examination to help identify the cause of iron deficiency. The history should focus on

potential etiologies and may include questions about diet, GI symptoms, history of pica or pagophagia, signs of blood loss, surgical history, and family history of GI malignancy.

Oral iron therapy should be used after iron deficiency anemia is diagnosed and underlying cause of iron deficiency anemia treatment (if applicable) is started. An increase in hemoglobin of 1 g/dL after one month of treatment shows an adequate response to treatment and confirms the diagnosis. In adults, therapy should be continued for three months after the anemia is corrected to allow iron stores to become replenished. Adherence to oral iron therapy can be a barrier to treatment because of GI adverse effects such as epigastric discomfort, nausea, diarrhea, and constipation. These effects may be reduced when iron is taken with meals, but absorption may decrease by 40%. Medications such as proton pump inhibitors and factors that induce gastric acid hyposecretion (e.g., chronic atrophic gastritis, recent gastrectomy, or vagotomy) are associated with reduced absorption of dietary iron and iron tablets.

Parenteral iron therapy may be used in patients who cannot tolerate or absorb oral preparations (e.g., patients who have undergone gastrectomy, gastrojejunostomy, bariatric surgery, or other small bowel surgeries). The most common indications for intravenous therapy include GI effects, worsening symptoms of inflammatory bowel disease, unresolved bleeding, renal failure induced anemia treated with erythropoietin, and insufficient absorption in patients with celiac disease.

Efficacy

Feraheme (ferumoxytol)¹

Feraheme consists of a superparamagnetic iron oxide that is coated with a carbohydrate shell, which helps to isolate the bioactive iron from plasma components until the iron-carbohydrate complex enters the reticuloendothelial system macrophages of the liver, spleen and bone marrow. The iron is released from the iron-carbohydrate complex within vesicles in the macrophages. Iron then either enters the intracellular storage iron pool (e.g., ferritin) or is transferred to plasma transferrin for transport to erythroid precursor cells for incorporation into hemoglobin.

Injectafer (ferric carboxymaltose)²

Ferric carboxymaltose is a colloidal iron (III) hydroxide in complex with carboxymaltose, a carbohydrate polymer that releases iron.

Monoferric (ferric derisomaltose)³

Ferric derisomaltose is a complex of iron (III) hydroxide and derisomaltose, an iron carbohydrate oligosaccharide that releases iron. Iron binds to transferrin for transport to erythroid precursor cells to be incorporated into hemoglobin.

Safety

Feraheme contains a black box warning for risk of serious hypersensitivity/anaphylaxis reactions. Hypersensitivity reactions have occurred in patients in whom a previous Feraheme dose was tolerated.

- Feraheme (ferumoxytol) is contraindicated in patients with:
 - Known hypersensitivity to Feraheme or any of its components
 - History of allergic reaction to any intravenous iron product
- Injectafer (ferric carboxymaltose) is contraindicated in patients with:
 - Known hypersensitivity to Injectafer or any of its inactive components
- Monoferric (ferric derisomaltose) is contraindicated in patients with:
 - Serious hypersensitivity to Monoferric or any of its components

References

1. Feraheme Prescribing Information. AMAG Pharmaceuticals, Inc. September 2020.
2. Injectafer Prescribing Information. American Regent, Inc. September 2020.
3. Monoferric Prescribing Information. Pharmacosmos A/S. September 2020.
4. Short MW, Domagalski JE. Iron deficiency Anemia: Evaluation and Management. Am Fam Physician. 2013 Jan 15;87(2):98-104.
5. Ferrlecit Prescribing Information. Sanofi-Aventis U.S. LLC. December 2020.
6. Infed Prescribing Information. Allergan USA, Inc. April 2021.
7. Venofer Prescribing Information. American Regent, Inc. October 2020.

Document History

Original Prime Standard Part B criteria, approved by P&T UM Committee 06/2021

Administrative Action (note generic availability of Feraheme) 08/2021

Mid-Year Review of Prime Standard Part B criteria with criteria change approved by P&T UM Committee 12/2021

Medicare Part B - Iron Replacement Prior Authorization Criteria

Coverage and policy application are contingent on National Coverage Determinations (NCD) and Local Coverage Determinations (LCD). An NCD or LCD that is applicable to the drug or product must be used in lieu of applicable medical necessity criteria. Also, please note that Prior Authorization criteria cannot be stricter than an NCD or LCD with specified step therapy requirements.

TARGET PREFERRED AGENT(S)	TARGET NON-PREFERRED AGENT(S)
Target preferred and non-preferred agent(s) to be determined client	Target preferred and non-preferred agent(s) to be determined client
Feraheme [®] (ferumoxytol) ^a Ferlecit (sodium ferric gluconate complex in sucrose) INFeD (iron dextran) Injectafer [®] (ferric carboxymaltose) Monoferric [®] (ferric derisomaltose) Venofer (iron sucrose)	

a - generic equivalent available

Brand (generic)	GPI	Multisource Code	HCPCS/J Code
Feraheme (ferumoxytol) ^a			
510 mg/17 mL vial	82300068002020	M, N, O, or Y	Q0138 Q0139
Ferlecit (sodium ferric gluconate complex in sucrose) ^a			
12.5 mL/mL vial	82300085102020	M, N, O, or Y	J2916
INFeD (iron dextran)			
50 mg/mL vial	82300040002010	M, N, O, or Y	J1750
Injectafer (ferric carboxymaltose)			
750 mg/15 mL vial	82300062002030	M, N, O, or Y	J1439
Monoferric (ferric derisomaltose)			
100 mg/mL vial	82300061002030	M, N, O, or Y	J1437
Venofer (iron sucrose)			
20 mg/mL vial	82300048002020	M, N, O, or Y	J1756

a - generic equivalent available

CRITERIA FOR APPROVAL

Evaluation

Target Agent(s) will be approved when ALL of the following are met:

1. The requested agent is being used for ONE of the following:
 - a. An FDA approved indication

OR

 - b. An indication in CMS approved compendia

AND
2. If the client has preferred agents, then ONE of the following:
 - a. The requested agent is the preferred agent

OR

 - b. Information has been provided that indicates the patient has been treated with the request agent in the past 365 days

OR

- c. There is documentation that the patient has had an ineffective treatment response to the active ingredient(s) of ALL preferred agent(s)
OR
- d. The patient has a documented intolerance, hypersensitivity, or FDA labeled contraindication to the active ingredient(s) of ALL preferred agent(s)
OR
- e. The prescriber has submitted documentation indicating ALL preferred agent(s) are likely to be ineffective or are likely to cause an adverse reaction or other harm to the patient

AND

- 3. The patient does NOT have any FDA labeled contraindications to the requested agent

AND

- 4. The requested quantity (dose) is within FDA labeled dosing or supported in compendia for the requested indication

Length of Approval: up to 12 months