Clinical Policy: Iron Sucrose (Venofer)

Reference Number: PA.CP.PHAR.167
Effective Date: 01/18
Last Review Date: 01/19

Revision Log
Coding Implications

Description
Iron sucrose (Venofer®) injection is an iron replacement product.

Policy/Criteria
It is the policy of Pennsylvania Health and Wellness that Venofer is **medically necessary** for members meeting the following criteria:

I. Initial Approval Criteria

A. Iron Deficiency Anemia associated with Chronic Kidney Disease (must meet all):

1. Diagnosis of iron deficiency anemia (IDA) and chronic kidney disease (CKD);
2. IDA is confirmed by either of the following:
   a. Transferrin saturation (TSAT) ≤ 30%;
   b. Serum ferritin ≤ 500 ng/mL
3. If CKD does not require hemodialysis or peritoneal dialysis, oral iron therapy is not optimal due to any of the following:
   a. TSAT < 12%;
   b. Hemoglobin (Hgb) < 7 g/dL;
   c. Symptomatic anemia;
   d. Severe or ongoing blood loss;
   e. Oral iron intolerance;
   f. Unable to achieve therapeutic targets with oral iron;
   g. Co-existing condition that may be refractory to oral iron therapy.
4. Dose does not exceed 500 mg elemental iron per injection.

Approval duration: 3 months

B. Iron Deficiency Anemia not associated with Chronic Kidney Disease (must meet all):

1. Diagnosis of IDA confirmed by any of the following:
   a. Serum ferritin < 15 ng/mL or < 30 ng/mL if pregnant;
   b. Serum ferritin ≤ 41 ng/mL and Hb* < 12 g/dL (women)/< 13 g/dL (men);
   c. TSAT < 20%;
   d. Absence of stainable iron in bone marrow;
   e. Increased sTfR or sTfR-ferritin index;
   f. Increased erythrocyte protoporphyrin level;
2. Oral iron therapy is not optimal due to any of the following:
   a. TSAT <12%;
   b. Hgb < 7 g/dL;
   c. Symptomatic anemia;
   d. Severe or ongoing blood loss;
   e. Oral iron intolerance;
   f. Unable to achieve therapeutic targets with oral iron;
   g. Co-existing condition that may be refractory to oral iron therapy.

3. At the time of the request, member does not have CKD.

Approval duration: 3 months

C. Other diagnoses/indications: Refer to PA.CP.PMN.53

II. Continued Approval Criteria

A. Iron Deficiency Anemia associated with Chronic Kidney Disease (must meet all):

1. Currently receiving the medication via Pennsylvania Health and Wellness benefit or member has previously met all initial approval criteria or the Continuity of Care policy (PA.LTSS.PHAR.01) applies;
2. Documentation of one of the following laboratory results measured since the last IV iron administration;
   a. TSAT ≤ 30%;
   b. Serum ferritin ≤ 500 ng/mL;
3. If request is for a dose increase, new dose does not exceed 500 mg elemental iron per injection.

Approval duration 3 months

B. Iron Deficiency Anemia not associated with Chronic Kidney Disease (must meet all):

1. Currently receiving the medication via Pennsylvania Health and Wellness benefit or member has previously met all initial approval criteria or the Continuity of Care policy (PA.LTSS.PHAR.01) applies;
2. Documentation of one of the following laboratory results measured since the last IV iron administration:
   a. Serum ferritin < 15 ng/mL or < 30 ng/mL if pregnant;
   b. Serum ferritin ≤ 41 ng/mL and Hgb < 12 g/dL (women)/< 13 g/dL (men);
   c. TSAT < 20%;
   d. Absence of stainable iron in bone marrow;
   e. Increased sTfR or sTfR-ferritin index;
   f. Increased erythrocyte protoporphyrin level;
3. 3. At the time of the request, member does not have CKD.

Approval duration 3 months

C. Other diagnoses/indications (must meet 1 or 2)**:**

1. Currently receiving medication via Pennsylvania Health and Wellness benefit or the Continuity of Care policy (PA.LTSS.PHAR.01) applies and documentation supports positive response to therapy; or
2. Refer to PA.CP.PMN.53

Background

Description/Mechanism of Action

Venofer (iron sucrose injection, USP), an iron replacement product, is an aqueous complex of poly-nuclear iron (III)-hydroxide in sucrose. Following intravenous administration, Venofer is dissociated into iron and sucrose and the iron is transported as a complex with transferrin to target cells including erythroid precursor cells. The iron in the precursor cells is incorporated into hemoglobin as the cells mature into red blood cells.

III. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

CKD: chronic kidney disease
ESA: erythropoiesis stimulating agent
Hb: hemoglobin
IDA: iron deficiency anemia
TSAT: transferrin saturation
sTfR: soluble transferring receptor

Appendix B: Therapeutic Alternatives

This table provides a listing of preferred alternative therapy recommended in the approval criteria. The drugs listed here may not be a formulary agent and may require prior authorization.

Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose
Examples of OTC Oral Iron Formulations*		
Ferrous fumarate (Ferretts, Ferrimin 150, Hemocyte)	Varies	
Ferrous gluconate (Ferate)		
Ferrous sulfate (BProtected Pedia Iron, Fer-In-Sol, FeroSul, FerrouSul, Iron Supplement Childrens, Slow Fe, Slow Iron)		
Polysaccharide-iron complex (EZFE 200, Ferrex 150, Ferrix x-150, Myferon 150, NovaFerrum 125, NovaFerrum 50, NovaFerrum Pediatric Drops, Nu-Iron, Poly-Iron 150)		

Therapeutic alternatives are listed as Brand name® (generic) when the drug is available by brand name only and generic (Brand name®) when the drug is available by both brand and generic.
**Oral formulations include elixirs, liquids, solutions, syrups, capsules, and tablets - including delayed/extended-release tablets.*

Appendix C: Contraindications/Boxed Warnings

- Contraindication(s): Known hypersensitivity to Venofer.
- Boxed warning(s): None reported.

IV. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
Adults - IDA with CKD: Iron Repletion		
Hemodialysis	100 mg as IV injection or infusion per consecutive HD session.	100 mg per injection/infusion -Treatment course: 1000 mg -Treatment may be repeated
No dialysis	200 mg as IV injection or infusion administered on 5	500 mg per injection/infusion -Treatment course: 1000 mg

Indication	Dosing Regimen	Maximum Dose
	different occasions over a 14 day period or 500 mg on days 1 and 14.	-Treatment may be repeated
Peritoneal dialysis	3 divided doses, by IV infusion, within a 28 day period: 2 infusions each of 300 mg 14 days apart followed by one 400 mg infusion 14 days later.	400 mg per injection/infusion -Treatment course: 1000 mg -Treatment may be repeated
Children ≥ 2 years - IDA with CKD: Iron Maintenance		
Hemodialysis	0.5 mg/kg slow IV injection or infusion not to exceed 100 mg per dose, every TWO weeks for 12 weeks.	100 mg per injection/infusion -Treatment course: 1200 mg -Treatment may be repeated
No dialysis or peritoneal dialysis And receiving erythropoietin therapy	0.5 mg/kg slow IV injection or infusion not to exceed 100 mg per dose, every FOUR weeks for 12 weeks.	100 mg per injection/infusion -Treatment course: 2400 mg -Treatment may be repeated

V. Product Availability

Intravenous solution: 20 mg/mL (2.5 mL, 5mL, 10mL)

References

1. Venofer prescribing information. Shirley, NY: American Regent, Inc.; February 2018. Available from http://www.venofer.com/PDF/Venofer_PI_82015.pdf. Accessed November 06, 2018.
2. KDIGO 2012 clinical practice guideline for evaluation and management of chronic kidney disease. *Kidney International Supplements.* January 2013; 3(1): 1-136.
3. KDIGO 2012 clinical practice guideline for anemia in chronic kidney disease. *Kidney International Supplements.* August 2012; 2(4): 279-331.
4. Camaschella C. Iron-Deficiency Anemia. *N Engl J Med.* 2015; 372: 1832-43. DOI: 10.1056/NEJMra1401038.
5. Short MW, Domagalski JE. Iron Deficiency Anemia: Evaluation and Management. *Am Fam Physician.* 2013; 87(2): 98-104. http://www.aafp.org/afp/2013/0115/p98.pdf
6. Oral iron monographs. In: UpToDate (Lexicomp), Waltham, MA: Walters Kluwer Health; 2018. Available at www.uptodate.com. Accessed November 06, 2018.

Coding Implications

Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

HCPCS Codes	Description
J1756	Injection, iron sucrose, 1 mg

Reviews, Revisions, and Approvals	Date	Approval Date
Doses added. References reviewed.	02/18	
1Q 2019 annual review; under IDA initial and continuation criteria, a serum ferritin of less than or equal to 500 is edited by deleting the additional requirement of receiving an ESA based on the KDIGO 2012 guidelines which do not include this restriction; under IDA and IDA with CKD continuation criteria, the greater than or equal to 4 week waiting period before retesting after the last IV iron administration is removed per the KDIGO 2012 guidelines which note that only one week need pass before retesting; references reviewed and updated.	01/19	