Clinical Policy: Deferoxamine (Desferal)

Reference Number: CP.PHAR.146
Effective Date: 11.15
Last Review Date: 11.17
Line of Business: Medicaid

Revision Log

See Important Reminder at the end of this policy for important regulatory and legal information.

Description
Deferoxamine (Desferal®) is an iron-chelating agent.

FDA Approved Indication(s)
Desferal is indicated:

- For the treatment of acute iron intoxication.
  - Desferal is an adjunct to, and not a substitute for, standard measures used in treating acute iron intoxication, which may include the following: induction of emesis with syrup of ipecac; gastric lavage; suction and maintenance of a clear airway; control of shock with intravenous (IV) fluids, blood, oxygen, and vasopressors; and correction of acidosis.
- For the treatment of chronic iron overload due to transfusion-dependent anemias.
  - Desferal can promote iron excretion in patients with secondary iron overload from multiple transfusions (as may occur in the treatment of some chronic anemias, including thalassemia).
  - Long-term therapy with Desferal slows accumulation of hepatic iron and retards or eliminates progression of hepatic fibrosis.
  - Iron mobilization with Desferal is relatively poor in patients under the age of 3 years with relatively little iron overload. The drug should ordinarily not be given to such patients unless significant iron mobilization (e.g., 1 mg or more of iron per day) can be demonstrated.

Limitation of use: Desferal is not indicated for the treatment of primary hemochromatosis, since phlebotomy is the method of choice for removing excess iron in this disorder.

Policy/Criteria
Provider must submit documentation (including office chart notes and lab results) supporting that member has met all approval criteria

It is the policy of health plans affiliated with Centene Corporation® that Desferal is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Acute Iron Intoxication (must meet all)**:**

1. Diagnosis of acute iron intoxication;
2. Age ≥ 3 years;
3. Desferal will be used as an adjunct to standard measures used in treating acute iron intoxication (e.g., induction of emesis with syrup of ipecac; gastric lavage; suction

and maintenance of a clear airway; control of shock with IV fluids, blood, oxygen, vasopressors; correction of acidosis);
4. Prescribed dose should not exceed 6000 mg in 24 hours given by intramuscular (IM) or IV administration.

Approval duration: 1 month

B. Chronic Iron Overload Due to Transfusion-Dependent Anemias
1. Diagnosis of chronic iron overload due to transfusion-dependent anemia (e.g., congenital/acquired anemias including thalassemia, sickle cell anemia, aplastic anemia, myelodysplasia);
2. Age ≥ 3 years or significant iron mobilization (e.g., 1 mg or more of iron per day) can be demonstrated;
3. Documentation shows a transfusion history of ≥ 100 mL/kg of packed red blood cells (pRBCs) (e.g., ≥ 20 units of pRBCs for a 40 kg person or more in individuals weighing more than 40 kg) and a serum ferritin level > 1,000 mcg/L;
4. Member does not have primary hemochromatosis;
5. Dose does not exceeded recommendation for the relevant indication in Section V.

Approval duration: 6 months

C. Other diagnoses/indications
1. Refer to CP.PHAR.57 if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized).

II. Continued Therapy

A. Acute Iron Intoxication
1. Continuation of therapy will not be granted. New cases of acute iron intoxication must be evaluated against the initial approval criteria.

B. Chronic Iron Overload Due to Transfusion-Dependent Anemias (must meet all)**:**
1. Currently receiving medication via Centene benefit or member has previously met all initial approval criteria;
2. Current documentation (within the last 30 days) shows a serum ferritin level ≥ 500 mcg/L.

Approval duration: 12 months

C. Other diagnoses/indications (1 or 2)**:**
1. Currently receiving medication via health plan benefit and documentation supports positive response to therapy.

Approval duration: Duration of request or 6 months (whichever is less); or
2. Refer to CP.PHAR.57 if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized)

III. Diagnoses/Indications for which coverage is NOT authorized:

A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policy – CP.PHAR.57 or evidence of coverage documents

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

FDA: Food and Drug Administration
IM: intramuscular
IV: intravenous
pRBCs: packed red blood cells

V. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
Acute iron intoxication	IM administration: A 1000 mg dose should be administered initially. This may be followed by 500 mg every 4 hours for two doses. Depending on clinical response, subsequent doses of 500 mg may be given every 4-12 hours. The total amount administered should not exceed 6000 mg in 24 hours. [This route is preferred and should be used for all patients not in shock].	6000 mg in 24 hours.
	IV administration: An initial 1000 mg dose should be administered at a rate not to exceed 15 mg/kg/hr. This may be followed by 500 mg over 4 hours for two doses. Depending on clinical response, subsequent doses of 500 mg may be administered over 4-12 hours. The total amount administered should not exceed 6000 mg in 24 hours. [This regimen should be used only for patients in cardiovascular collapse and only by slow infusion].	
Chronic iron overload	Subcutaneous administration: A daily dose of 1000-2000 mg (20-40 mg/kg/day) should be administered over 8-24 hours.	See dosing regimen.
	IV administration: The standard dose is 20 – 40 mg/kg/day for children and 40 – 50 mg/kg/day over 8 – 12 hours in adults for 5 – 7 days per week. The IV infusion rate should not exceed 15 mg/kg/hour.	Children: average dose should not exceed 40 mg/kg/day until growth has ceased. Adults, average dose should not exceed 60 mg/kg/day.
	IM administration: A daily dose of 500-1000 mg may be administered IM. The total daily dose should not exceed 1000 mg.	1000 mg/day

VI. Product Availability

Each carton of four vials contains either:

- 500 mg of sterile, lyophilized deferoxamine mesylate per vial; or
- 2 g of sterile, lyophilized deferoxamine mesylate per vial

VII. References

1. Desferal Prescribing Information. East Hanover, NJ: Novartis Pharmaceuticals Corporation; December 2011. Available at: https://dailymed.nlm.nih.gov/dailymed/. Accessed May 8, 2017.
2. Musallam KM, Angastiniotis M, Eleftheriou A, Porter JB. Cross-talk between available guidelines for the management of patients with beta-thalassemia major. Acta Haematol. 2013; 130: 64-73. DOI: 10.1159/000345734.
3. Hoffbrand AV, Taher A, Cappellini MD. How I treat tranfusional iron overload. Blood. November 1, 2012; 120(18): 3657-3669.

Reviews, Revisions, and Approvals	Date	Approval Date
Convert to independent policy Desferal criteria - reformatted per contraindications in appendix B; added exclusion of primary hemochromatosis to appendix B per PI	08.15	11.15
Policy converted to new format. Added acute iron intoxication indication. Age removed and documentation requests added; "current documentation" defined as "within the last 30 days" for follow-up serum ferritin levels. Initiation of therapy: transfusion history and serum ferritin level per the PI dosing; the wording "and consistent ferritin levels >1,000" is changed to "or a serum ferritin level >1,000; examples of transfusion-dependent anemias added.	09.16	11.16
Converted to new template. Re-auth: clarified that continuation of therapy will not be granted for acute iron intoxication- new cases must be evaluated against the initial approval criteria; duration of approval extended to 6 and 12 months for chronic iron overload. Safety criteria was applied according to the safety guidance discussed at CPAC and endorsed by Centene Medical Affairs.	09.17	11.17

Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. "Health Plan" means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan's affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and

limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom the Health Plan has no control or right of control. Providers are not agents or employees of the Health Plan.

This clinical policy is the property of the Health Plan. Unauthorized copying, use, and distribution of this clinical policy or any information contained herein are strictly prohibited. Providers, members and their representatives are bound to the terms and conditions expressed herein through the terms of their contracts. Where no such contract exists, providers, members and their representatives agree to be bound by such terms and conditions by providing services to members and/or submitting claims for payment for such services.

Note: For Medicaid members, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.