

Clinical Policy: Deferoxamine (Desferal)

Reference Number: LA.PHAR.146

Effective Date: 09.15.22

Last Review Date: 05.09.24

Line of Business: Medicaid

[Coding Implications](#)

[Revision Log](#)

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

****Please note: This policy is for medical benefit****

Description

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

FDA Approved Indication(s)

Desferal is indicated:

- As an adjunct to standard measures for the treatment of acute iron intoxication.
- For the treatment of transfusional iron overload in patients with chronic anemia.

Limitation(s) 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 (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

It is the policy of Louisiana Healthcare Connections 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. If request is for brand Desferal, member must use generic deferoxamine, unless contraindicated or clinically significant adverse effects are experienced;
3. Dose does not exceed 6,000 mg in 24 hours (IM or IV).

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. Transfusion history of ≥ 100 mL/kg of packed red blood cells (e.g., ≥ 20 units of packed red blood cells for a 40 kg person);
3. Serum ferritin level $> 1,000$ mcg/L;
4. If request is for brand Desferal, member must use generic deferoxamine, unless contraindicated or clinically significant adverse effects are experienced;

5. Therapy does not include concurrent use of other iron chelators, unless member has excess cardiac iron as evidence by cardiac T2* < 20 millisecond or iron-induced cardiomyopathy;
6. Dose does not exceed any of the following (a, b, or c):
 - a. SC: 2,000 mg per day;
 - b. IV: 40 mg/kg per day for children; 60 mg/kg per day for adults;
 - c. IM: 1,000 mg per day.

Approval duration: 6 months

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

1. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to LA.PMN.255
2. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy LA.PMN.53

II. Continued Therapy

A. Acute Iron Intoxication

1. Re-authorization is not permitted. Members must meet initial approval criteria for new cases of acute iron intoxication.

Approval duration: Not applicable

B. Chronic Iron Overload due to Transfusion-Dependent Anemias (must meet all):

1. Currently receiving medication via Louisiana Healthcare Connections benefit or member has previously met initial approval criteria;
2. Member is responding positively to therapy as evidenced by a decrease in serum ferritin levels as compared to pretreatment baseline;
3. Current documentation (within the last 30 days) shows a serum ferritin level ≥ 500 mcg/L;
4. If request is for brand Desferal, member must use generic deferoxamine, unless contraindicated or clinically significant adverse effects are experienced;
5. Therapy does not include concurrent use of other iron chelators, unless member has excess cardiac iron as evidence by cardiac T2* < 20 millisecond or iron-induced cardiomyopathy;
6. If request is for a dose increase, new dose does not exceed any of the following (a, b, or c):
 - a. SC: 2,000 mg per day;
 - b. IV: 40 mg/kg per day for children; 60 mg/kg per day for adults;
 - c. IM: 1,000 mg per day.

Approval duration: 12 months

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

1. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to LA.PMN.255

2. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy LA.PMN.53

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 LA.PMN.53
- B. Primary hemochromatosis;
- C. Parkinson’s disease.

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key
FDA: Food and Drug Administration

Appendix B: Therapeutic Alternatives
Not applicable

Appendix C: Contraindications/Boxed Warnings

- Contraindication(s):
 - Known hypersensitivity to the active substance
 - Severe renal disease or anuria, since the drug and the iron chelate are excreted primarily by the kidney
- Boxed warning(s): none reported

Appendix D: General Information

- In FAIRPARK-II, deferiprone, an iron chelator, was associated with worse scores in measures of parkinsonism compared to placebo over a 36-week period in participants with newly diagnosed Parkinson’s disease who had never received levodopa.

V. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
Acute iron intoxication	1,000 mg x 1 dose, then 500 mg Q4-12 hr PRN* <i>*IM route if patient not in shock; IV infusion limited to patients in cardiovascular collapse.</i>	6,000 mg/24 hr
Chronic iron overload	Average daily dose between 20-60 mg/kg SC infusion QD	See dosing regimen
	20-40 mg/kg IV daily (children*) and 40-50 mg/kg IV daily (adults) for 5-7 days per week <i>*Maximum recommended daily dose is 40 mg/kg/day until growth (body weight and linear growth)has ceased.</i>	40 mg/kg/day (children) 60 mg/kg/day (adults)
	500-1,000 mg IM/day	1,000 mg/day

VI. Product Availability

Single-dose vial of lyophilized deferoxamine mesylate: 500 mg, 2 g

VII. References

1. Desferal Prescribing Information. East Hanover, NJ: Novartis Pharmaceuticals Corporation; September 2022. Available at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2022/016267s062lbl.pdf. Accessed April 14, 2023.
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 transfusional iron overload. *Blood.* November 1, 2012; 120(18): 3657-3669.
4. Cappellini MD, Farmakis D, Porter J, et al. 2021 Guidelines for the management of transfusion dependent thalassemia (TDT) 4th edition. Thalassaemia International Federation. 2021. Available at: <https://thalassaemia.org.cy/publications/tif-publications/guidelines-for-the-management-of-transfusion-dependent-thalassaemia-4th-edition-2021/>. Accessed May 4, 2022.
5. Devos D, Labreuche J, Rascol O, et al. Trial of deferiprone in Parkinson’s disease. *N Engl J Med* 2022; 387:2045-2055.
6. Children’s Hospital & Research Center Oakland. 2012 Standards of Care Guidelines for Thalassemia. Available at: <https://thalassemia.com/documents/SOCGuidelines2012.pdf>. Accessed May 4, 2023.
7. Sheth S. Strategies for managing transfusional iron overload: conventional treatments and novel strategies. *Curr Opin Hematol.* 2019 May; 26(3): 139-144.

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
J0895	Injection, deferoxamine mesylate, 500 mg

Reviews, Revisions, and Approvals	Date	LDH Approval Date
Converted corporate to local policy. Template changes applied to other diagnoses/indications and continued therapy section.	09.22	09.15.22
Template changes applied to other diagnoses/indications and continued therapy section. Added Parkinson disease to section III with rationale in Appendix D. Added verbiage this policy is for medical benefit only.	06.02.23	10.05.23
Annual review: updated FDA approved indications per prescribing information; per competitor analysis for continuation of therapy in chronic iron overload added requirement that member is responding	05.09.24	

Reviews, Revisions, and Approvals	Date	LDH Approval Date
positively to therapy as evidenced by a decrease in serum ferritin levels as compared to pretreatment baseline; for chronic iron overload added requirement that therapy does not include concurrent use of other iron chelators, unless member has excess cardiac iron as evidence by cardiac T2* < 20 millisecond or iron-induced cardiomyopathy; references reviewed and updated.		

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. LHCC 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.

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