

## REGIONAL ADULT PARENTERAL DRUG MONOGRAPH

GENERIC NAME

# deferoxamine mesylate (chronic iron overload)

Effective Date: Dec 2011

CLASSIFICATION

Iron chelator for chronic iron overload

Chronic iron overload

CLASSIFICATION

OTHER NAMES

Desferal

1 of 1

ADMINISTRATION POLICY: NOTE: For use in acute toxicity, refer to deferoxamine acute iron toxicity

IM Injection — May be administered by a nurse IV Intermittent — May be administered by a nurse

Subcutaneous/Subcutaneous Infusion — May be administered by a nurse/consult with hematologist or urologist

### RECONSTITUTION/DILUTION/ADMINISTRATION:

**Available as:** 500 mg vial and 2-gram vial

Vial	Diluent	Diluent volume	Final concentration	Final volume
IV/Subcut: 500 mg	SWFI*	5 mL	95 mg/mL	5.3 mL
IV/Subcut: 2 grams	SWFI *	20 mL	95 mg/mL	21.1 mL
IM: 500 mg	SWFI *	2 mL	213 mg/mL	2.3 mL
IM: 2 grams	SWFI*	8 mL	213 mg/mL	9.4 mL

<sup>\*</sup>SWFI = Sterile Water for Injection

#### **IV** intermittent:

Dose	Diluent Volume (usual)	Diluent Volume (range)
1000 mg or less	50 mL	25 to 100 mL
1001 mg or greater	100 mL	50 to 100 mL

**DOSAGE:** 

**IM:** 500 to 1000 mg/day

**IV** intermittent: 40 to 50 mg/kg/day over 8 to 12 hours for 5 to 7 days per week

**Subcutaneous:** 1000 to 2000 mg/day or 20 to 40 mg/kg/day over 8 to 24 hours for 5 to 7 days per week

Maximum daily dose: IM: 1000 mg

IV: 60 mg/kg Subcut: 2000 mg

#### STABILITY/COMPATIBILITY:

**Stability of multidose vial:** 3 hours at room temperature **Stability of Final Admixture:** 24 hours at room temperature

Compatibility: Compatible with normal saline, D5W, Ringer's Lactate

## PRECAUTIONS, POTENTIAL ADVERSE REACTIONS:

- Hypotension, tachycardia, flushing, urticaria (especially if given too rapidly), rash, anaphylaxis
- Abdominal pain, diarrhea, nausea, vomiting
- Prior to and during deferoxamine therapy, ensure that the intravascular volume is not depleted. Volume depletion during deferoxamine therapy has been associated with nephrotoxicity.

#### ADDITIONAL NOTES AND NURSING CONSIDERATIONS:

- Longer infusion times (24 hours) may be required in patients with severe cardiac iron deposition.
- Subcutaneous infusion: Depending on infusion period, the total volume of the drug can be added to an empty mini bag system to infuse over the prescribed time. Once infusion is complete, ensure the line is flushed with saline at the same rate until drug in tubing is absorbed. May be diluted with D5W to deliver 1 mL/hour.
- When administered for chronic iron overload, daily dose is usually given over 8 12 hours using portable infusion pump (if available). Topical anesthetic or glucocorticoid creams may be used for induration or erythema.
- Obtain baseline vital signs and monitor at 15 minutes then as clinically indicated
- Monitor intake and output