# Appendix B: Parenteral Iron Formulations and Adult Doses

This Appendix is a supplement to the *BC Guideline Iron Deficiency – Investigation and Management*.

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<th>Iron Product</th>
<th>Formulation (elemental iron)</th>
<th>Usual Adult Daily Dose</th>
<th>Adverse Reactions</th>
<th>Therapeutic Considerations</th>
<th>Cost per 30 Days and PharmaCare Coverage</th>
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<td>iron sucrose</td>
<td>Injection (IV): 20 mg Fe/mL</td>
<td>100 to 300 mg IV intermittent per session, given as a total cumulative dose of 1000 mg over 14 days</td>
<td>CNS: headache, fever CVs: hypotension GI: metallic taste, nausea, vomiting MSK: muscular pain, cramps</td>
<td>• Hypotension may occur from rapid IV administration; doses greater than 300 mg associated with significant hypotension.</td>
<td>$405/1000mg (Non-benefit)</td>
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| iron dextran complex | Injection (IV or IM): 50 mg Fe/mL | Based on body weight and hemoglobin; IV intermittent (maximum 1000 mg/day); or IM up to 100 mg Fe per site (maximum 250 mg/day) | CNS: fever MSK: arthralgia, myalgia | • A test dose of 25mg elemental iron (0.5 mL) must be given before administering the first therapeutic dose.  
• Total dose depends on patient's weight and hemoglobin level.  
• IM iron therapy is not recommended because risks include unpredictable absorption and local complications (e.g. pain, permanent staining of the skin). | $297/1000 mg (Regular benefit) |
| ferric gluconate complex | Injection (IV): 12.5 mg Fe/mL | 125 mg (10 mL) IV per dose; up to 1000 mg over 8 sessions | CNS: generalized seizures CVs: hypotension, hypertension, vasodilation GI: diarrhea, nausea | • Indicated for treatment of iron-deficiency anemia in patients 6 years and older with chronic kidney disease undergoing hemodialysis in conjunction with supplemental erythropoietin therapy. | $460/1000 mg (Non-benefit) |

Maximum hemoglobin response to IV iron usually occurs within 2 to 3 weeks of the last dose.

**Abbreviations:** BID twice daily; CNS central nervous system; CVS cardiovascular system; Fe elemental iron; GI gastrointestinal; IV intravenous; IM intramuscular; max maximum; mg milligrams; mL milliliters; MSK muscular skeletal.


Iron Dextran dose: total dose (mg) required to restore hemoglobin (Hgb in g/L) to normal: 50 x (0.00442 [desired Hgb – observed Hgb] x LBW + [0.26 x LBW])

LBW in kg (male) = 50 kg + (2.3 x inches over 5 feet)

LBW in kg (female) = 45.5 kg + (2.3 x inches over 5 feet)

†† Prices are estimates as of January 2019 based on the maximum adult dose. All prices are subject to change.