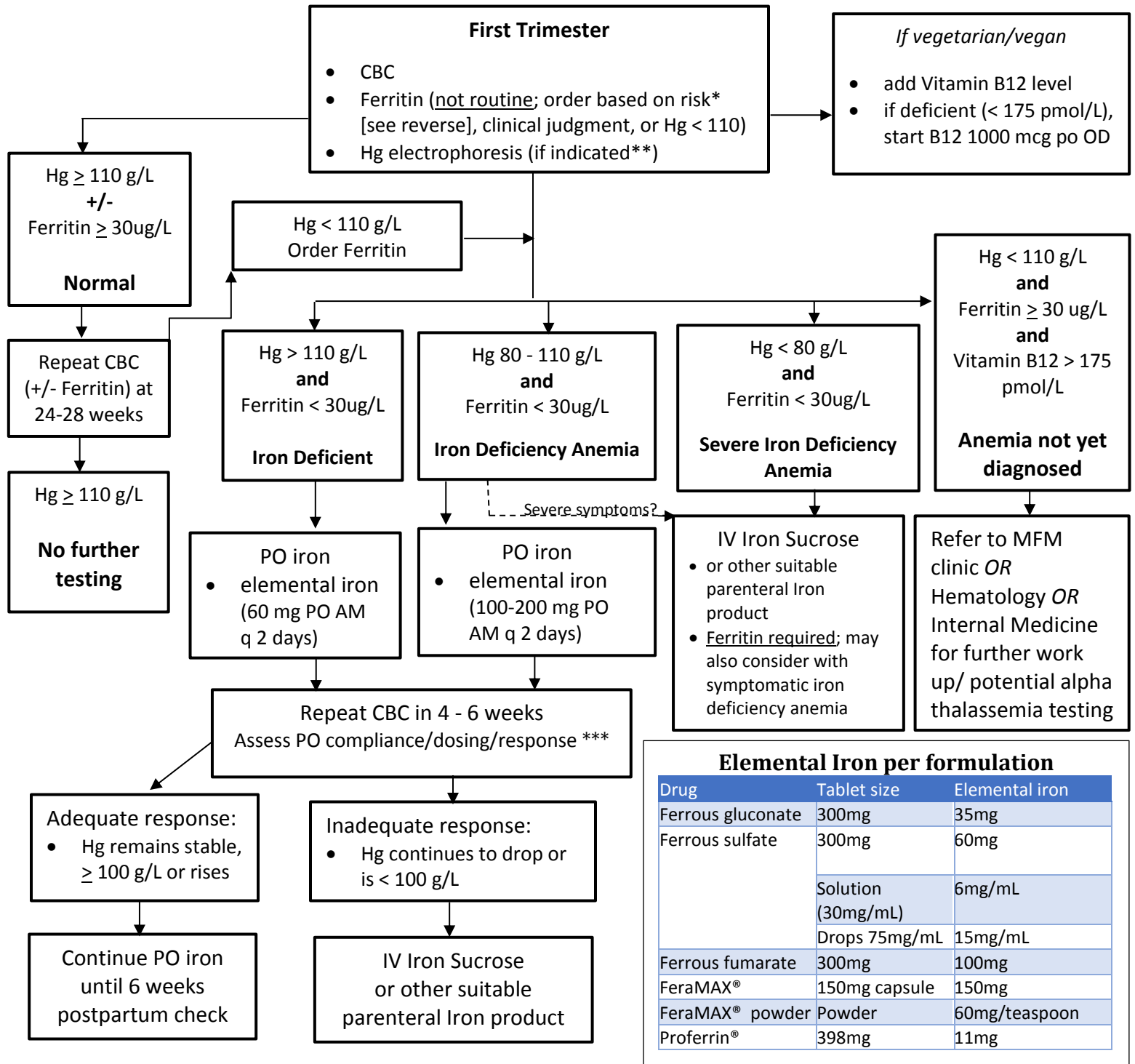


Antenatal Anemia and Iron Deficiency Screening/Treatment Algorithm



Elemental Iron per formulation

Drug	Tablet size	Elemental iron
Ferrous gluconate	300mg	35mg
Ferrous sulfate	300mg	60mg
	Solution (30mg/mL)	6mg/mL
	Drops 75mg/mL	15mg/mL
Ferrous fumarate	300mg	100mg
FeraMAX®	150mg capsule	150mg
FeraMAX® powder	Powder	60mg/teaspoon
Proferrin®	398mg	11mg

**** Ethnicities at risk for Hemoglobinopathy:**

African
Mediterranean
Middle Eastern
South East Asia
South American
South Asian (not Korean/Japanese)

- Consider Hg Electrophoresis (if not previously done)

***** Considerations**

- Oral absorption is improved with: administration first thing in morning, every 2nd day, empty stomach, concurrent ascorbic acid administration, not concurrently with calcium, PPI or other acid reduction medications
- Oral dosing can take at least 3 months to replenish iron stores
- If severe iron deficiency or minimal response to oral iron (taken correctly) consider celiac disease screen
- Oral iron may not be first choice for patients post-bariatric surgery

Adapted from the Alberta/Sask Blood Obstetric Anemia Screening and Treatment Algorithm, & IWK Obstetric Anemia and Iron Deficiency Screening/Treatment Algorithm (2021)

Indications for Ordering Serum Ferritin

Adapted from Alberta/Saskatchewan Blood Obstetric Anemia Screening and Treatment Algorithm,
& IWK Obstetric Anemia and Iron Deficiency Screening/Treatment Algorithm

Anemic pregnant persons where testing serum ferritin is necessary prior to iron supplementation:

- Known haemoglobinopathy
- Prior to parenteral (IV) iron replacement

Non-anemic pregnant persons with high risk of iron depletion for empirical iron treatment with/without serum ferritin testing:

- Previous anaemia
- Multiparity \geq P3
- Twin or higher order multiple pregnancy
- Interpregnancy interval $<$ 1 year
- Those who have poor dietary habits (*or who are experiencing food insecurity*)
- Those following a vegetarian/vegan diet
- Age $<$ 20 years
- Recent history of clinically significant bleeding

Non-anemic pregnant persons where serum ferritin may be necessary:

- High risk of bleeding during pregnancy or at birth
- Those declining blood products, such as Jehovah's Witnesses
- Those for whom providing compatible blood is challenging

References:

Anemia in Pregnancy. ACOG Practice Bulletin No. 233. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2021;138:e55–64.

Blood Transfusion in Obstetrics. RCOG Green-top Guideline No. 47 (May 2015). Royal College of Obstetricians and Gynaecologists.

Screening and Treatment of Obstetric Anemia: A Review of Clinical effectiveness, Cost Effectiveness, and Guidelines. Ottawa: CADTH; 2019 Dec. (CADTH rapid response report: summary with critical appraisal).