

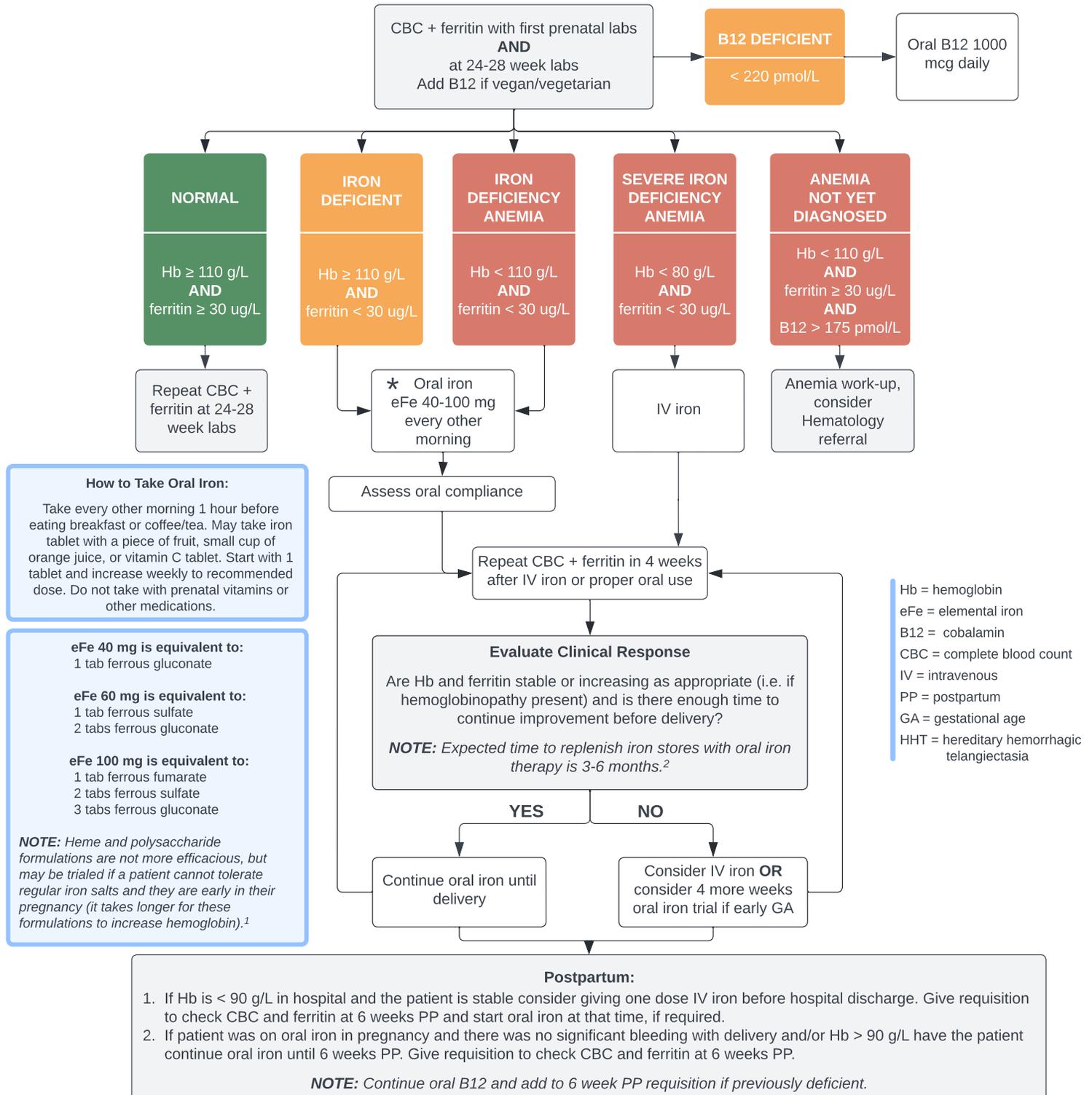
Drugs and Therapeutic Background:

Alberta Obstetric Anemia and Iron Deficiency Screening and Treatment Algorithm

Screening for anemia and iron deficiency early in pregnancy and treating with a trial of optimized oral iron therapy can help prevent obstetrical and neonatal complications.

Potential risks of anemia and iron deficiency include: mood disorders and fatigue, abruption, c-section, blood transfusion, preterm delivery, low birthweight, as well as possible cognitive, motor and future memory issues in the newborn.

If the patient has or is suspected of having an underlying bleeding disorder and/or a diagnosis of hereditary hemorrhagic telangiectasia (HHT), then the following algorithm may not apply and direct assessment may be warranted.



IV Iron:

- Iron sucrose (Venofer®) 100 mg/5 mL vial.
 - Usual Rx: 300 mg IV given over 90 minutes, every 3-7 days until cumulative dose met.
 - Calculate total cumulative IV iron dose using Ganzoni formula: current body weight (kg) x (target Hb - actual Hb in g/L) x 0.24 + 500 mg.
 - Suggestion for target Hb is 120 g/L.
 - [Ganzoni Equation for Iron Deficiency Anemia - MDCalc](#)
 - **NOTE:** Ganzoni formula is not accurate for all populations - please note limitations.
- Ferric derisomaltose (Monoferric®, also known as iron isomaltoside 1000) 100 mg/mL vial (1 mL, 5 mL, 10 mL).
 - Usual Rx: 1000 mg IV given over 20 minutes, once.
 - **NOTE:** Currently ferric derisomaltose is NRDNP (not reviewed, do not provide) within AHS. However, ferric derisomaltose is covered under special authorization on the DBL and can be infused in private infusion centres.

NOTE: IV iron not recommended in the first trimester. Refer to [Parental Iron Safety Backgrounder](#).

Special Considerations:

- If anemic with low mean corpuscular volume consider hemoglobinopathy screening in patients from high risk ethnic backgrounds (non-caucasian, Mediterranean).
- If severe iron deficiency anemia or minimal response to oral iron (taken correctly) consider screening for celiac disease.
- Use clinical judgement in regards to Hb and ferritin targets for higher-risk patients (e.g., patients who may decline blood transfusions, patients who are at a higher risk of post-partum hemorrhage, etc.)
- If ferritin level is elevated and,
 - 1) patient is anemic and/or symptomatic, or
 - 2) there is other evidence of an inflammatory reaction,then consider full iron studies to further evaluate for iron deficiency.
- Providers are strongly encouraged to insert into requisitions, the use of pediatric tubes for blood draws to limit iatrogenic blood loss (not limited to bleeding disorders and/or HHT patients).

References:

1. Alberta Health Services - Drugs and Therapeutic Backgrounder: Iron dosing and administration in adults (2016). Available at: <https://www.albertahealthservices.ca/assets/info/phm/info-phm-ds-pub-dtb-iron-dosing-administration-adults.pdf>
2. Alberta Health Services - Drugs and Therapeutic Backgrounder: Optimizing the use of oral iron supplementation in the treatment of iron deficiency in anemia (2016). Available at: <https://www.albertahealthservices.ca/assets/info/phm/info-phm-ds-pub-dtb-iron-optimizing-oral-supplementation-treatment-iron-deficiency-anemia.pdf>
3. Pavord S, Daru J, Prasannan N, et al. UK guidelines on the management of iron deficiency in pregnancy. *British Journal of Haematology*. 2020;188;819-830.
4. RxFiles - Anemia: IRON Products (2023). Available at: <https://www.rxfiles.ca/RxFiles/uploads/documents/members/cht-anemia-iron-products.pdf> Registration and login required.