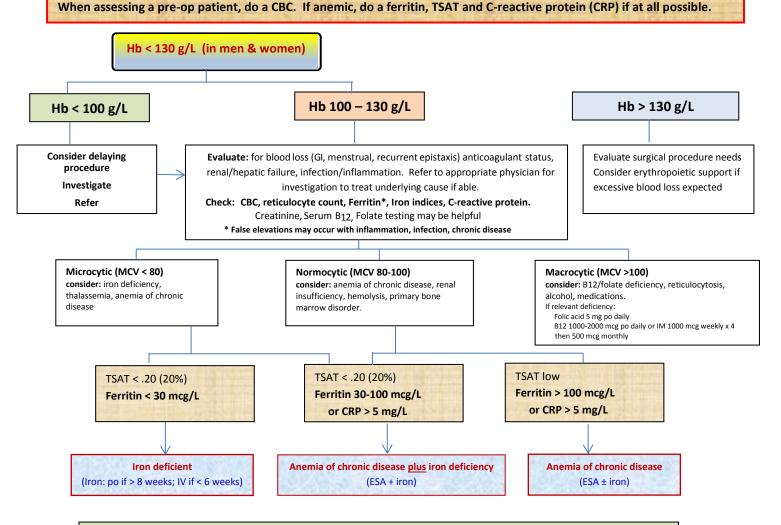
## **Preoperative Hemoglobin Optimization and Anemia Management**

Risk Factors for Transfusion: Hemoglobin (Hb) less than (<) 130 g/L, weight less than 65 Kg, elderly, female, complex or repeat surgical procedure, renal insufficiency (creatinine clearance <40 ml/min), antiplatelet agents, anticoagulants, some supplements

Interventions must take into consideration age, gender, anticipated surgical blood loss and pre-existing medical conditions.

A pre and post treatment Hb should ALWAYS be obtained; if still anemic, consider further dosing.



**Oral iron:** 100 – 200 mg elemental iron by mouth per day. **Note: alternate day therapy may be beneficial.** Check CBC & ferritin at 4 weeks prior to surgery and if still anemic, give IV iron. For iron-deficient patients in particular, ensure appropriate follow-up.

**IV** iron infusion:\*\* If oral iron contraindicated or short time to surgery (<6 weeks). Usual dose 1000 mg, if still anemic consider another 300-500 mg.

**Erythropoietin:\*\*** Usual target is Hb 130 g/L, **MAXIMUM** target in renal and oncology patients to less than 120 g/L. Patients with pre-existing thrombotic events should be monitored closely.

**Standard Dosing:** Epoetin Alfa 20 – 40,000 units subcutaneously (600 units/kg) weekly to a maximum of 4 doses depending on presenting hemoglobin and time to surgery.

**Short dosing schedule is available for urgent cases:** e.g. 300 IU/kg given for 10 consecutive days prior to surgery, on the day of surgery, and for four days immediately thereafter, or even one day preop/same day/postop.

Similarly for IV iron shorter schedules can be useful e.g. day of surgery

\*\* May be accessed in Ontario through third party provider of the Ontario Drug benefits Plan (Exceptional Access Program), Trillium



www.ontracprogram.com

