Iron Corner
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An Example of a Laboratory Testing Algorithm for Anemia

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NOTE: If Hemoglobin is **greater than or equal to 13 gm/dL**, no further evaluation is required. However, if the ferritin level is known to be less than 100 ng/dL or the transferrin saturation is known to be less than 20% with a ferritin less than 300 ng/dL, then consider iron therapy.

NOTE: If Hemoglobin is **less than 13 gm/dL**, the patient should be evaluated according to this testing algorithm. Additional laboratory studies may be ordered by the patient blood management provider. There may be a recommendation to postpone surgery with a referral back to the primary care provider or hematologist for further evaluation.

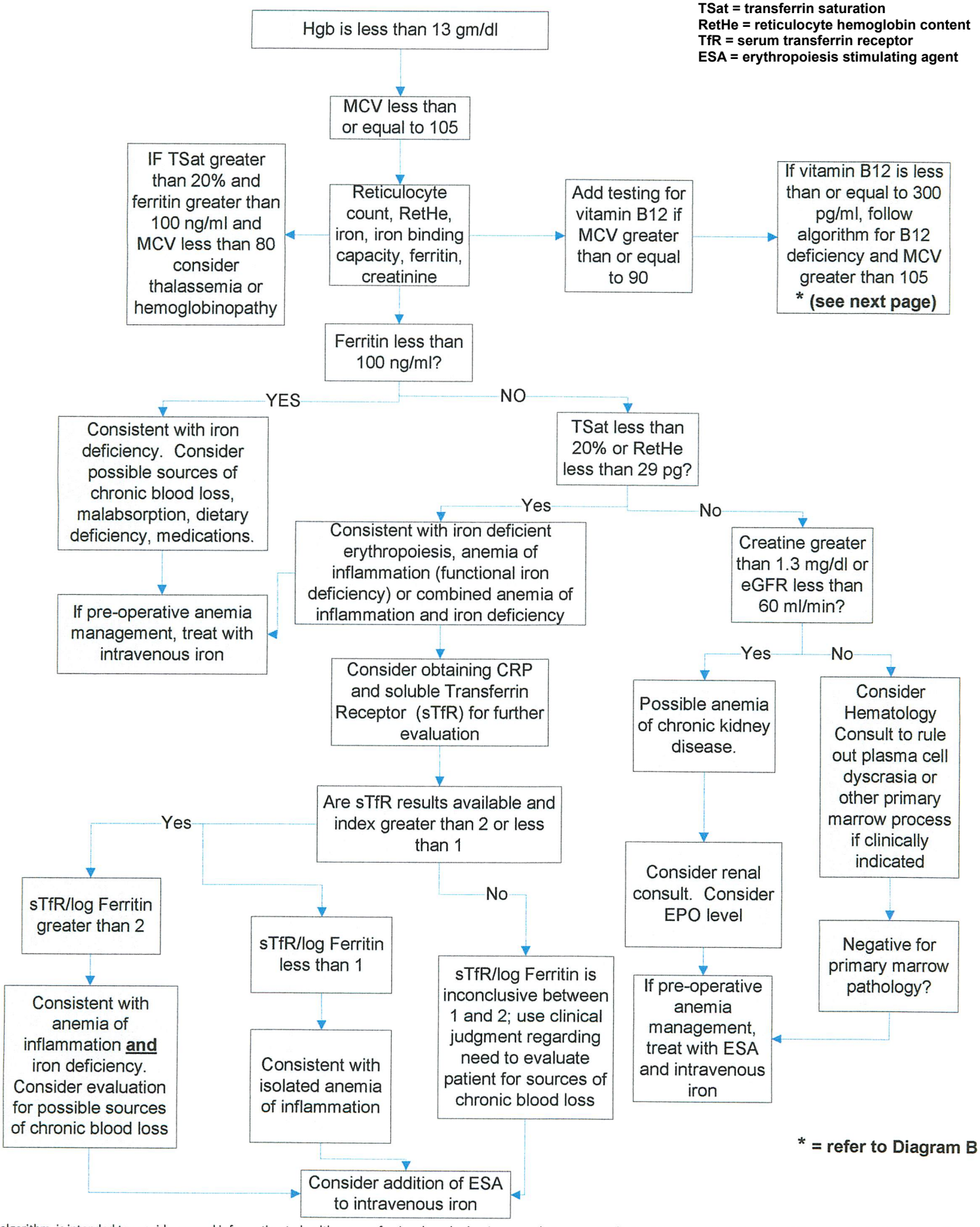
To enter the testing algorithm for anemia:

If Hgb is less than 13 gm/dL **AND** MCV is less than or equal to 105 fl: **see Flow Diagram A**.

If Hgb is less than 13 gm/dL **AND** MCV is greater than 105 fl: **see Flow Diagram B**.

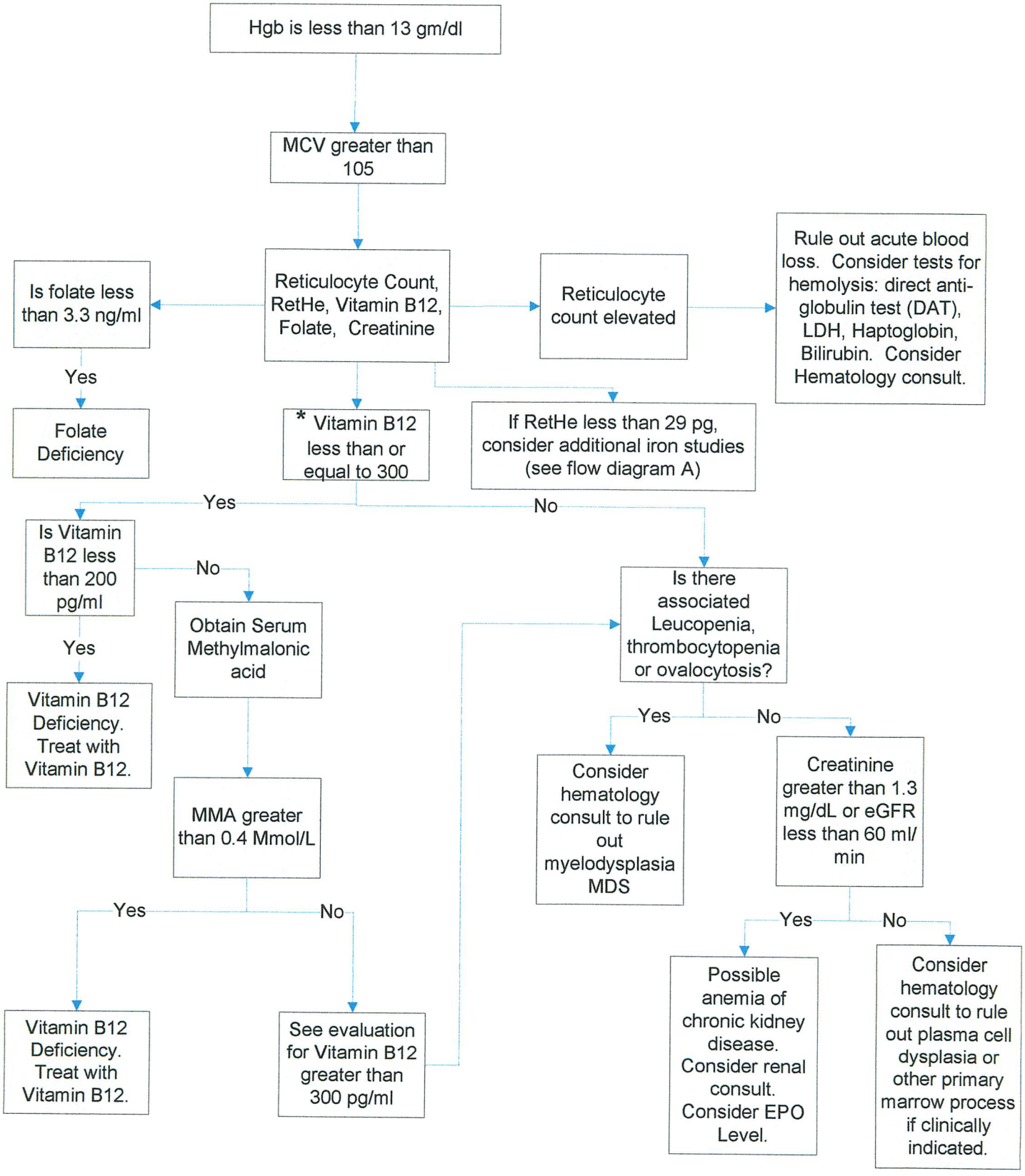
Flow Diagram A
MCV Less than or equal to 105

TSat = transferrin saturation
RetHe = reticulocyte hemoglobin content
TfR = serum transferrin receptor
ESA = erythropoiesis stimulating agent



*** = refer to Diagram B**

Flow Diagram B
MCV greater than 105



* begin here if patient with MCV less than 105 have vitamin B12 less than or equal to 300 pg/ml