

# ***NURSE OR PHARMACIST-LED ANEMIA MANAGEMENT PROTOCOL***

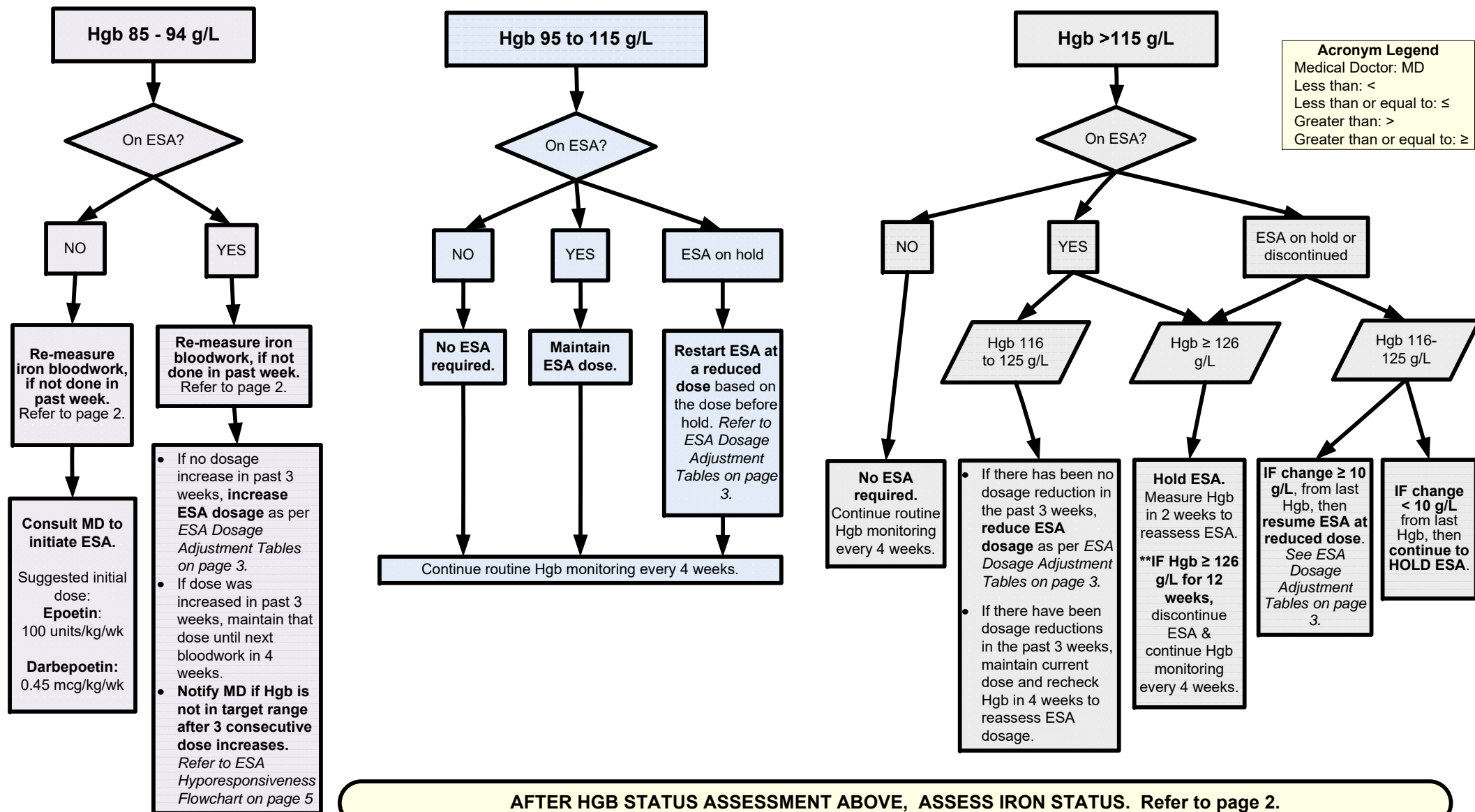
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**HGB/ ESA PROTOCOL: PAGE 1 ASSESS HGB STATUS**  
**Target Hgb: 95 to 115 g/L**

The following protocol, on order of physician, transfers anemia management of hemodialysis outpatients to nonphysician staff (i.e. nurses and renal pharmacists). **The following protocol is intended to serve as a guide and cannot replace your clinical judgment. ESA's are not recommended in patients with active malignancy or a stroke in last 3 months.** The recommendations included may also be inappropriate for other clinical situations (e.g. patients with hemochromatosis, thalassemia, PRCA, allergy to IV iron or an ESA, etc.). The lowest ESA dosage to achieve acceptable Hgb range should be used.

**Any decrease in Hgb  $\geq$  15 g/L, OR if Hgb  $<$  85g/L  $\rightarrow$  Notify MD**



**IRON/ IV IRON Protocol : Page 2 Assess Iron Status**

**\*\*Always consider HGB/ESA protocol FIRST**

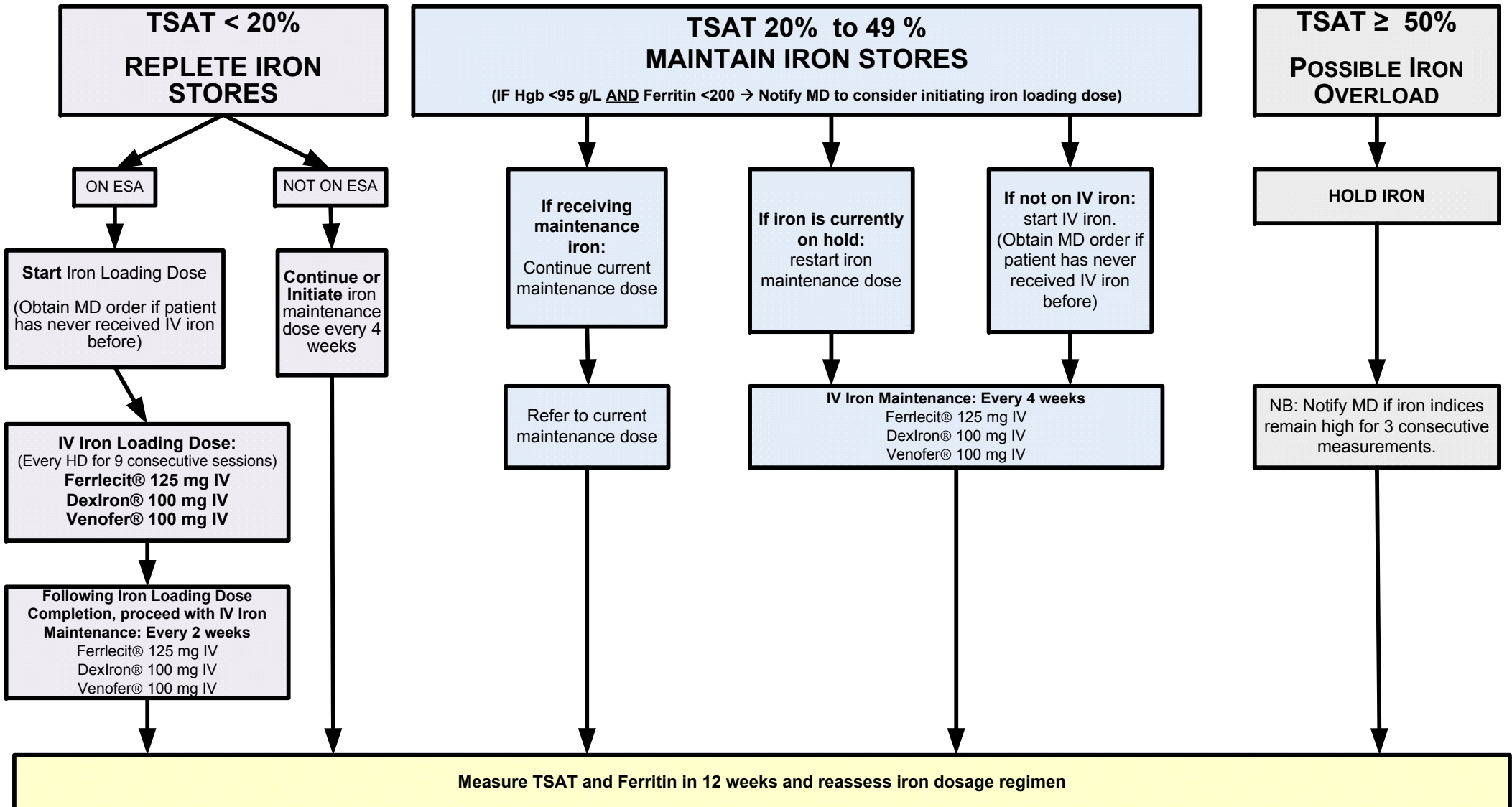
**Acronym Legend**  
 Medical Doctor: MD  
 Less than: <  
 Less than or equal to: ≤  
 Greater than: >  
 Greater than or equal to: ≥

Hgb > 115 g/L → HOLD IRON

Hgb ≤ 115 g/L → Continue Iron Assessment

If at anytime the serum ferritin is above 1000 µg/L, or the patient is on IV antibiotics or has signs and symptoms of sepsis (e.g. temp > 38°, chills, rigors, unexplained hypotension), notify the MD to assess ongoing iron use.

\*\*If iron bloodwork ever appears very unusual compared to previous results (e.g. replacement of iron stores, TSAT goes from < 20% to > 50%) repeat the bloodwork before initiating next action.





**PAGE 3. ESA DOSAGE ADJUSTMENT TABLES**

The following tables provide guidance for most dosage adjustments. If a patient’s Hgb cannot be maintained within the desired range with 3 consecutive dose modifications using the dosage schedule below, contact the physician for advice.

If a patient’s erythropoiesis stimulating agent (ESA) dosage is not available in the tables below, please contact a physician for ESA dosage modification. The lowest ESA dosage to maintain Hgb within acceptable range should be used.

**Darbepoetin (Aranesp®) Dosage Adjustment Table**

Pre-filled syringes available for CKD patients include: 10 mcg, 20 mcg, 30 mcg, 40 mcg, 50 mcg, 60 mcg, 80 mcg, 100 mcg, 130mcg and 150 mcg.

<i>Current Dose</i>	<i>Increase Dose</i>	<i>Decrease Dose</i>
<b><i>10 mcg every 2 weeks</i></b>	10 mcg every 1 week	D/C, check Hgb in 2 weeks
<b><i>10 mcg every 1 week</i></b>	20 mcg every 1 week	10 mcg <u>every 2 weeks</u>
<b><i>20 mcg every 1 week</i></b>	30 mcg every 1 week	10 mcg every 1 week
<b><i>30 mcg every 1 week</i></b>	40 mcg every 1 week	20 mcg every 1 week
<b><i>40 mcg every 1 week</i></b>	50 mcg every 1 week	30 mcg every 1 week
<b><i>50 mcg every 1 week</i></b>	60 mcg every 1 week	40 mcg every 1 week
<b><i>60 mcg every 1 week</i></b>	80 mcg every 1 week	50 mcg every 1 week
<b><i>80 mcg every 1 week</i></b>	100 mcg every 1 week	60 mcg every 1 week
<b><i>100 mcg every 1 week</i></b>	130 mcg every 1 week	80 mcg every 1 week
<b><i>130 mcg every 1 week</i></b>	150 mcg every 1 week	100 mcg every 1 week
<b><i>150 mcg every 1 week</i></b>	Check with nephrologist	130 mcg every 1 week

**Epoetin alpha (Eprex®) Dosage Adjustment Table**

Prefilled syringes available for CKD patients include: 1000 units, 2000 units, 3000 units, 4000 units, 5000 units, 6000 units, 8000 units and 10,000 units.

<i>Current Dose</i>	<i>Increase Dose</i>	<i>Decrease Dose</i>
<b><i>1000 units every 1 week</i></b>	2000 units <u>every 1 week</u>	D/C, check Hgb in 2 weeks
<b><i>2000 units every 1 week</i></b>	3000 units <u>every 1 week</u>	1000 units <u>every 1 week</u>
<b><i>3000 units every 1 week</i></b>	2000 units 2 times per week	2000 units <u>every 1 week</u>
<b><i>2000 units 2 times per week</i></b>	3000 units 2 times per week	3000 units <u>every 1 week</u>
<b><i>3000 units 2 times per week</i></b>	4000 units 2 times per week	2000 units 2 times per week
<b><i>4000 units 2 times per week</i></b>	5000 units 2 times per week	3000 units 2 times per week
<b><i>5000 units 2 times per week</i></b>	6000 units 2 times per week	4000 units 2 times per week
<b><i>6000 units 2 times per week</i></b>	8000 units 2 times per week	5000 units 2 times per week
<b><i>8000 units 2 times per week</i></b>	10,000 units 2 times per week	6000 units 2 times per week
<b><i>10,000 units 2 times per week</i></b>	8000 units <u>3 times per week</u>	8000 units 2 times per week
<b><i>8000 units 3 times per week</i></b>	10,000 units <u>3 times per week</u>	10,000 units 2 times per week
<b><i>10,000 units 3 times per week</i></b>	Check with nephrologist	8,000 units <u>3 times per week</u>

DATE (dd/mm/yy)	HGB with Draw Date	TSAT & Ferritin with Draw Date	Current ESA Dose	Current Iron Dose	Change ESA Dose To	Change Iron Dose To	Follow up Bloodwork and Draw Date	Kardex & database Updated	Other Comments	Staff Signature



## Page 5. ASSESS REASONS FOR ESA HYPORESPONSIVENESS

\*Physician must assess; information listed is for education only.

