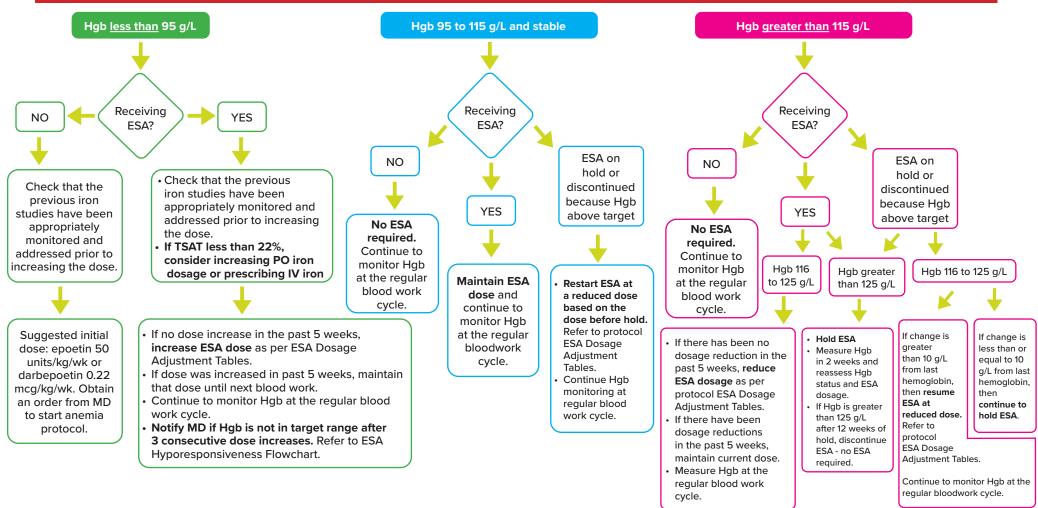
CKD Non-Dialysis Anemia Management Protocol



The following protocol, on order of physician, transfers anemia management of CKD non-dialysis patients to non-physician staff (i.e. RNs and renal pharmacists). The following protocol is intended to serve as a guide and cannot replace clinical judgement. The recommendations included may be inappropriate for specific clinical situations (e.g. patients with hemochromatosis, thalassemia, PRCA, allergy to IV iron or an erythropoiesis stimulating agent (ESA), hx of stroke, active malignancy, hx of malignancy, etc.). The lowest ESA dosage to achieve acceptable Hgb range should be used. This algorithm is based on the assumption that the patient is compliant to medication and blood work. Note: ESA refers to both epoetin alfa (Eprex®) and darbepoetin alfa (Aranesp®).





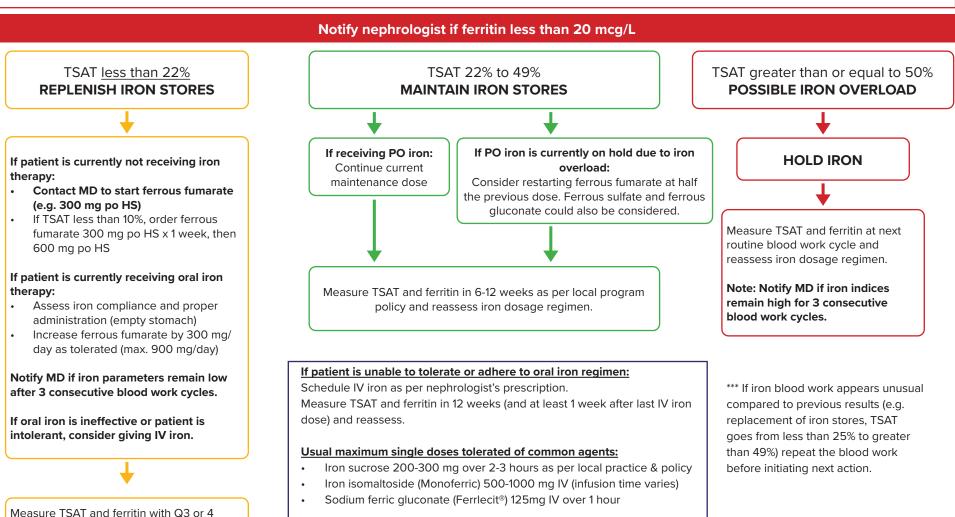
AFTER Hgb STATUS ASSESSMENT ABOVE, ASSESS IRON STATUS. Refer to page 2 for ferrous fumarate or intravenous iron protocol.

CKD Non-Dialysis Anemia Management Protocol



PAGE 2: ASSESS IRON STATUS (Standard Iron Parameters – TSAT & Ferritin)

If the patient has signs and symptoms of sepsis (e.g. temperature greater than 38', chills, rigors, unexplained hypotension), notify the nephrologist to assess ongoing iron use. If the serum ferritin is above 1000mcg/L, hold intravenous iron.



dosage regimen.

months bloodwork cycle and reassess iron

CKD Non-Dialysis Anemia Management Protocol: ESA Dosing Adjustment Table



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

Darbepoetin Alfa (Aranesp®) Dosage Adjustment Table

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

Current Dose		Increase Dose*		Decrease Dose*	
10 mcg	subcut every 2 weeks	20 mcg	subcut every 2 weeks	D/C, check	Hgb in 2 weeks
20 mcg	subcut every 2 weeks	30 mcg	subcut every 2 weeks	10 mcg	subcut every 2 weeks
30 mcg	subcut every 2 weeks	40 mcg	subcut every 2 weeks	20 mcg	subcut every 2 weeks
40 mcg	subcut every 2 weeks	50 mcg	subcut every 2 weeks	30 mcg	subcut every 2 weeks
50 mcg	subcut every 2 weeks	60 mcg	subcut every 2 weeks	40 mcg	subcut every 2 weeks
60 mcg	subcut every 2 weeks	80 mcg	subcut every 2 weeks	50 mcg	subcut every 2 weeks
80 mcg	subcut every 2 weeks	100 mcg	subcut every 2 weeks	60 mcg	subcut every 2 weeks
100 mcg	subcut every 2 weeks	130 mcg	subcut every 2 weeks	80 mcg	subcut every 2 weeks
130 mcg	subcut every 2 weeks	150 mcg	subcut every 2 weeks	100 mcg	subcut every 2 weeks
150 mcg	subcut every 2 weeks	100 mcg	subcut <u>every 1 week</u>	130 mcg	subcut every 2 weeks
100 mcg	subcut <u>every 1 week</u>	130 mcg	subcut <u>every 1 week</u>	150 mcg	subcut every 2 weeks
130 mcg	subcut <u>every 1 week</u>	150 mcg	subcut <u>every 1 week</u>	100 mcg	subcut every 1 week
150 mcg	subcut <u>every 1 week</u>	No further inc	rease, check with nephrologist	130 mcg	subcut <u>every 1 week</u>
*For dosage increase or decrease, change interval to use up current syringes before starting new dosage.					

Refer to ESA Dosing Interval Adjustment Table.

Epoetin Alfa (Eprex[®]) Dosage Adjustment Table

Pre-filled syringes available include: 1000 units, 2000 units, 3000 units, 4000 units, 5000 units, 6000 units, 8000 units and 10,000 units.

Current Dose		Increase Dose*		Decrease Dose*	
1,000 units	subcut every 1 week	2,000 units	subcut every 1 week	D/C, check H	gb in 2 weeks
2,000 units	subcut every 1 week	3,000 units	subcut every 1 week	1,000 units	subcut every 1 week
3,000 units	subcut every 1 week	4,000 units	subcut every 1 week	2,000 units	subcut every 1 week
4,000 units	subcut every 1 week	5,000 units	subcut every 1 week	3,000 units	subcut every 1 week
5,000 units	subcut every 1 week	6,000 units	subcut every 1 week	4,000 units	subcut every 1 week
6,000 units	subcut every 1 week	8,000 units	subcut every 1 week	5,000 units	subcut every 1 week
8,000 units	subcut every 1 week	10,000 units	subcut every 1 week	6,000 units	subcut every 1 week
10,000 units	subcut every 1 week	6,000 units	subcut <u>twice per week</u>	8,000 units	subcut every 1 week
6,000 units	subcut <u>twice per week</u>	8,000 units	subcut <u>twice per week</u>	10,000 units	subcut every 1 week
8,000 units	subcut <u>twice per week</u>	10,000 units	subcut twice per week	6,000 units	subcut <u>twice per week</u>
10,000 units	subcut <u>twice per week</u>	8,000 units	subcut <u>3 times per week</u>	8,000 units	subcut <u>twice per week</u>
8,000 units	subcut <u>3 times per week</u>	10,000 units	subcut <u>3 times per week</u>	10,000 units	subcut <u>twice per week</u>
10,000 units	subcut <u>3 times per week</u>	No further increas	e, check with nephrologist	8,000 units	subcut <u>3 times per week</u>
*For dosage increase or decrease, change interval to use up current syringes before starting new dosage.					

Refer to ESA Dosing Interval Adjustment Table.

CKD Non-Dialysis Anemia Management Protocol: ESA Dosing Adjustment Table



DARBEPOETIN ALFA (ARANESP®) DOSING INTERVAL ADJUSTMENT TABLE (to use up current supplies at home)

	INCREASED DOSE	DECREASED DOSE	
CURRENT DOSE	CHANGE INTERVAL TO	CHANGE INTERVAL TO	
10 mcg every 2 weeks		HOLD	
20 mcg every 2 weeks		Every 21 days	
30 mcg every 2 weeks			
40 mcg every 2 weeks			
50 mcg every 2 weeks	Even 10 days		
60 mcg every 2 weeks	Every 10 days		
80 mcg every 2 weeks			
100 mcg every 2 weeks			
130 mcg every 2 weeks			
150 mcg every 2 weeks			
100 mcg every 1 week	Even E deve		
130 mcg every 1 week	Every 5 days	Every 10 days	
150 mcg every 1 week	Check with MD		

EPOETIN ALFA (EPREX[®]) DOSING INTERVAL ADJUSTMENT TABLE (to use up current supplies at home)

CURRENT DO		INCREASED DOSE	DECREASED DOSE
CORRENT DO	J 5E	CHANGE INTERVAL TO	CHANGE INTERVAL TO
1,000 units	every 1 week		HOLD
2,000 units	every 1 week		
3,000 units	every 1 week		
4,000 units	every 1 week		
5,000 units	every 1 week	Every 5 days	Every 10 days
6,000 units	every 1 week		
8,000 units	every 1 week		
10,000 units	every 1 week		
6,000 units	twice per week		
8,000 units	twice per week	Every 3 days	Every 5 days
10,000 units	twice per week		
8,000 units	three times per week	Every 2 days	
10,000 units	three times per week	Check with MD	Every 3 days