

Appendix 2- TARGETS FOR TREATMENT (AND STRATEGY AS TO HOW TO ACHIEVE THE TARGETS)

| | | |
|--------------------|---------------|--------------------------|
| Phosphate: | <1.8mmol/L | (renal association 2002) |
| Corrected calcium: | 2.2-2.6mmol/L | (renal association 2002) |
| PTH: | 150-300pg /ml | (K/DOQI 2004) |

These targets will be aimed for using the following algorithm

To go through algorithm you will need corrected calcium, phosphate and PTH. Use PTH to find appropriate chart then follow instructions according to calcium and phosphate result.

If PTH has not been measured use most recent PTH.

Ensure PTH measured at least 3 monthly during maintenance phase.

PTH < 150pg/ml

| Pts on cinacalcet and std therapy | Pts on std therapy |
|--|--|
| Ca <2.2 PO4 ≤1.8 | Ca <2.2 PO4 ≤1.8 |
| Decrease dose of cinacalcet 1 step <u>If no change after 1-2 week or if calcium <1.9 add/increase calcium supplementation 1 step.</u> | Add/increase calcium supplementation 1 step If no change after 1-2 week or if calcium <1.9 then increase dose of Vitamin D 1 step |
| Ca <2.2 PO4 >1.8 | Ca <2.2 PO4 >1.8 |
| Increase dose of ca containing phosphate binders 1 step | Increase dose of ca containing phosphate binders 1 step |
| Ca >2.6 PO4 ≤1.8 | Ca >2.6 PO4 ≤1.8 |
| Decrease dose of ca containing phosphate binders 1 step If no improvement in 1-2 week or not on ca phosphate binders then decrease dose of Vitamin D 1 step | Decrease dose of ca containing phosphate binders 1 step If no improvement in 1-2 week or not on ca phosphate binders then decrease dose of Vitamin D 1 step |
| Ca >2.6 PO4 >1.8 | Ca high PO4 high |
| Decrease Vitamin D 1 step If not on vit D then increase dose of non-ca containing phosphate binders 1 step | Decrease Vitamin D 1 step If not on vit D then increase dose of non-ca containing phosphate binders |
| Ca 2.2-2.6 PO4 <0.6 | Ca 2.2-2.6 PO4 <0.6 |
| Encourage dietary intake And reduce dose of cinacalcet 1 step | Encourage dietary intake |
| Ca 2.2-2.6 PO4 >1.8 | Ca 2.2-2.6 PO4 >1.8 |
| Increase dose of non-ca containing phosphate binders 1 step | Increase dose of non-ca containing phosphate binders 1 step |
| Ca 2.2-2.6 PO4 <1.8 | Ca 2.2-2.6 PO4 <1.8 |
| Decrease vitamin D 1 step If PTH not between 150-300 next checked then decrease dose of cinacalcet 1 step | Decrease Vitamin D |

PTH 150-300pg/ml

| Pts on cinacalcet and std therapy | Pts on std therapy |
|--|--|
| Ca <2.2 PO4 ≤1.8 | Ca <2.2 PO4 ≤1.8 |
| Increase dose of Vitamin D 1 step If no improvement in 1-2 weeks then add calcium supplementation 1 step | Increase dose of Vitamin D 1 step If no improvement after 1-2 weeks then add calcium supplementation 1 step |
| Ca <2.2 PO4 >1.8 | Ca <2.2 PO4 >1.8 |
| Increase ca containing phosphate binders 1 step | Increase ca containing phosphate binders 1 step |
| Ca >2.6 PO4 ≤1.8 | Ca >2.6 PO4 ≤1.8 |
| Decrease ca containing phosphate binders 1 step If not on, then decrease vit D 1 step, If not on then increase cinacalcet 1 step | Decrease ca containing phosphate binders 1 step If not on, decrease vit D 1 step |
| Ca >2.6 PO4 >1.8 | Ca >2.6 PO4 >1.8 |
| Decrease Vitamin D 1 step If not on, decrease ca containing phosphate binders and increase non calcium containing phosphate binders 1 step each If not on vit D or calcium phosphate binders then increase dose of cinacalcet 1 step | Decrease Vitamin D 1 step If not on, decrease ca containing phosphate binders and increase non calcium containing phosphate binders 1 step each |
| Ca 2.2-2.6 PO4 <0.6 | Ca 2.2-2.6 PO4 <0.6 |
| Encourage dietary intake | Encourage dietary intake |
| Ca 2.2-2.6 PO4 >1.8 | Ca 2.2-2.6 PO4 >1.8 |
| Increase dose of non-ca containing phosphate binders 1 step If no change after 1-2 weeks increase dose on cinacalcet 1 step | Increase dose of non-ca containing phosphate binders 1 step |
| Ca 2.2-2.6 PO4 ≤1.8 | Ca 2.2-2.6 PO4 ≤1.8 |
| No change | No change |

PTH >300 pg/ml

| Pts on cinacalcet and std therapy | Pts on std therapy |
|---|--|
| Ca <2.2 PO4 <=1.8 Increase Vitamin D 1 step | Ca low PO4 =/low Increase Vitamin D 1 step |
| Ca <2.2 PO4 >1.8 Increase ca containing phosphate binders 1 step | Ca <2.2 PO4 >1.8 Increase ca containing phosphate binders 1 step |
| Ca >2.6 PO4 <=1.8 Increase cinacalcet 1 step And decrease calcium phosphate binders 1 step | Ca >2.6 PO4 <=1.8 Decrease calcium containing phosphate binders 1 step If not on ca phosphate binders then decrease vitamin D 1 step |
| Ca >2.6 PO4 >1.8 Increase cinacalcet 1 step If on maximum dose then decrease vitamin D If on maximum cinacalcet and not on vit D then increase non-ca containing phosphate binders 1 step and decrease ca phosphate binders 1 step | Ca >2.6 PO4 >1.8 Decrease vitamin D 1 step and increase non-ca containing phosphate binders 1 step If not on vit D then increase non-ca containing phosphate binders 1 step and decrease ca phosphate binders 1 step |
| Ca 2.2-2.6 PO4 <1.8 Increase cinacalcet 1 step If on maximum dose increase vitamin D 1 step | Ca 2.2-2.6 PO4 <1.8 Increase vitamin D 1 step |
| Ca 2.2-2.6 PO4 >1.8 Increase cinacalcet 1 step If on maximum dose then increase non-ca containing phosphate binders 1 step | Ca 2.2-2.6 PO4 >1.8 Increase non-ca containing phosphate binders 1 step |
| Ca 2.2-2.6 PO4 <1.8 Increase cinacalcet 1 step If on maximum dose increase vitamin D 1 step | Ca 2.2-2.6 PO4 <1.8 Increase vitamin D 1 step |

Cinacalcet:

1. 30mg
2. 60mg
3. 90mg
4. 120mg
5. 150mg
6. 180mg max dose

Calcium supplementation / phosphate binders:

Use calcium containing compound

Calcichew = 500mg calcium

Calcium acetate(phosex) = 250mg

Calcium 500 = 500mg

Total daily dose increments:

1. 500mg
2. 1000mg
3. 1500mg
4. 2000mg
5. 2500mg
6. 3000mg
7. 4000mg

Patients may need to miss a dose increment depending on which tablet they are taking. This is because not all patients are tolerant of all types mentioned.

Non-calcium containing phosphate binders

Sevelamer 800mg

Total daily dose increments:

1. 1600mg
2. 2400mg
3. 4000mg
4. 4800mg
5. 6400mg
6. 7200mg

Patients may jump an increment if felt clinically necessary. No maximum dose, if higher doses required please discuss with one of clinicians involved in the trial.

Vitamin D

Available compounds:

One-alpha available in 0.25mcg, 0.5mcg and 1 mcg tablets

Calcitriol 0.25mcg, 0.5 mcg

0.25 micrograms (mcg) = 250 nanograms (ng)

Tablets can be given daily, twice a week or three times a week

Total WEEKLY dose increments:

1. 0.5mcg
2. 1.0 mcg
3. 1.5 mcg
4. 2.0 mcg
5. 2.5mcg
6. 3.0 mcg
7. 3.5mcg
8. 4.0 mcg
9. 5.0mcg
10. 6.0mcg
11. 7.0mcg

Maximum dose is 35mcg per week. If further increases are necessary then consult clinician involved in trial.

Patients may jump an increment if felt necessary by clinician