

# Chronic Maintenance In-Center Standing Orders – Paricalcitol

# Paricalcitol (ICD10 - N25.81)

**1. Targets:** iPTH 200 – 400 pg/ml Calcium ≤ 10.2

## 2. Labs:

- a. Draw monthly calcium (in NKC Profile) unless otherwise indicated by tables below.
- b. Draw iPTH quarterly (Jan.-Apr.-July-Oct.) unless otherwise indicated by tables below.
- c. Draw labs with the routine monthly lab draws unless otherwise indicated by tables below.
- d. If calcium > 10.5 notify physician for guidance on management. If paricalcitol on hold for elevated calcium continue to check calcium with monthly labs or per the Held Dose Algorithm (Table 4) below.

### 3. Dosing:

 Paricalcitol dosing is based on tiers that correspond to specific doses in mcg as indicated in Table 1:

| Table | 1: | Tier | Dosing |
|-------|----|------|--------|
|-------|----|------|--------|

| Tier | Dose, mcg | Tier | Dose, mcg      |
|------|-----------|------|----------------|
| 0    | 0         | 6    | 6              |
| 1    | 1         | 7    | 8              |
| 2    | 2         | 8    | 10             |
| 3    | 3         | 9    | 12             |
| 4    | 4         | 10   | 14             |
| 5    | 5         | >10  | Call physician |

- b. Give paricalcitol doses IV, 3x/week with dialysis. If patient dialyzes >3x/week, ensure doses are spaced evenly 3x/week throughout the week. If patient runs only 1 or 2 times per week administer the dose with each dialysis i.e. qweek or 2x/week respectively.
- c. Always use the most recent calcium and iPTH when applying the algorithms.
- d. The percent iPTH change (PPC) = [(current iPTH previous iPTH) / current iPTH]\*100. The current iPTH is considered to be the most recently drawn iPTH and the previous iPTH is the iPTH level prior to the most recent iPTH.

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- e. Incident Patient Algorithm (paricalcitol naïve):
  - i. Paricalcitol naïve = has not received any paricalcitol (or other active vitamin D agent, e.g. calcitriol, hectorol) within past year.
  - ii. Do not start paricalcitol until calcium <9.5, monitor calcium monthly
  - iii. Once calcium is <9.5 give paricalcitol at the mcg dose and draw next iPTH as indicated per Table 2 below:

| Table 2: Incident Patient (paricalcitol naive) Algorithm |              |      |       |           |
|--|--------------|------|-------|-----------|
| Calcium  | iPTH         | Tier | Dose  | Next iPTH |
| (mg/dl)  | (pg/ml)      |      | (mcg) | draw      |
| < 9.5  | < 200        | 0    | 0     | Quarterly |
|  | 200 - 400    | 2    | 2     | Quarterly |
|  | 401 - 500    | 4    | 4     | One month |
|  | 501 - 600    | 5    | 5     | One month |
|  | > 600        | 7    | 8     | One month |
| ≥ 9.5  | Do not start |      |       | Quarterly |

- iv. Once paricalcitol started and result of next iPTH draw known, proceed per Prevalent Patient Algorithm (Table 3) below.
- f. **Prevalent Patient Algorithm** (patients already on paricalcitol)
  - i. Using the most recent calcium, iPTH and PPC\* (item 3. d above) determine Tier Adjustment based on Table 3 below:

| Table 3: Prevalent Patient Algorithm (for patients already on paricalcitol) |           |              |                       |           |              |
|---|-----------|--------------|-----------------------|-----------|--------------|
| Calcium   | iPTH      | PPC (Percent | Tier Adjustment       | Next iPTH | Next Ca      |
| (mg/dl)   | (pg/ml)   | iPTH Change) |                       | draw      | draw         |
| ≤ 10.1  | < 200     | NA           | Hold dose             | One month | Monthly labs |
|   | 200 - 400 | -80 or more  | Decrease 2 tiers      | One month | Monthly labs |
|   |           | -80 ↔ -21    | Decrease 1 tier       | Quarterly | Monthly labs |
|   |           | -20 ↔ 20     | Maintain current tier | Quarterly | Monthly labs |
|   |           | 21 ↔ 80      | Increase 1 tier       | Quarterly | Monthly labs |
|   |           | > 80         | Increase 2 tiers      | One month | Monthly labs |
|   | 401 - 500 | -80 or more  | Maintain current tier | One month | Monthly labs |
|   |           | -80 ↔ -21    | Maintain current tier | Quarterly | Monthly labs |
|   |           | -20 ↔ 20     | Increase 1 tier       | Quarterly | Monthly labs |
|   |           | 21 ↔ 80      | Increase 1 tier       | Quarterly | Monthly labs |
|   |           | > 80         | Increase 2 tiers      | One month | Monthly labs |
|   | 501 - 600 | -80 or more  | Maintain current tier | One month | Monthly labs |
|   |           | -80 ↔ -21    | Increase 1 tier       | Quarterly | Monthly labs |
|   |           | -20 ↔ 20     | Increase 1 tier       | Quarterly | Monthly labs |
|   |           | 21 ↔ 80      | Increase 1 tier       | Quarterly | Monthly labs |
|   |           | > 80         | Increase 2 tiers      | One month | Monthly labs |
|   | > 600     | -80 or more  | Increase 1 tier       | One month | Monthly labs |
|   |           | -80 ↔ -21    | Increase 1 tier       | Quarterly | Monthly labs |
|   |           | -20 ↔ 20     | Increase 1 tier       | Quarterly | Monthly labs |
|   |           | 21 ↔ 80      | Increase 2 tiers      | One month | Monthly labs |
|   |           | > 80         | Increase 3 tiers      | One month | Two weeks    |
|   |           |              |                       |           |              |
| > 10.1  |           | Hold Do      | ose                   | Quarterly | Two weeks    |

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- ii. If dosing Tier drops to "0" use the "Held Dose Algorithm" (Table 4) below to determine restart tier.
- iii. If a dose above tier 10 (14 mcg) is reached for 3 consecutive months and the iPTH remains above 600, switch to guarterly iPTH draws and notify physician of relative vitamin D resistance.
- g. Held Dose Algorithm (for prevalent patients)
  - i. HOLD paricalcitol for calcium > 10.1 mg/dl or iPTH < 200 pg/ml ii. Draw labs and adjust dose Tier per Table 4 below.

| Table 4: Held Dose Algorithm (for prevalent patients) |                        |      |  |   |  |
|---|------------------------|------|--|---|--|
| Calcium<br>(mg/dl)                                    | <b>iPTH</b><br>(pg/ml) | PPC  | Tier Adjustment  | Next iPTH draw  | Next Ca draw   |
| ≤ 10.1  | < 200                  | NA   | Continue to hold dose  | One month, if 3<br>consecutive draws are<br><200, switch to quarterly | Monthly labs   |
|   | ≥ 200                  | ≤ 80 | Reduce dose by 1<br>tier lower than<br>the dose at the<br>time of hold, if<br>the dose tier was<br>1 at the time of<br>hold resume dose<br>at tier 1 | One month   | Two weeks  |
|   |                        | > 80 | Resume same<br>dose as at the<br>time of hold  | One month   | Two weeks  |
| > 10.1  | NA                     | NA   | Continue to hold dose  | Quarterly   | Two weeks, if 3<br>consecutive draws<br>≥ 10.2, contact<br>physician |

Physician Name (Please Print) RN Name (Please Print)

Physician signature (see referral sheet) RN signature

Date