

# Cinacalcet

## Endocrinology / Renal Shared Care Guideline

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See [www.ipnsm.hscni.net](http://www.ipnsm.hscni.net)

Specialist Details	
Name:	_____
Location:	_____
Tel:	_____

Patient Identifier	
Date:	_____

### Introduction

Hyperparathyroidism (HPT) is an increase in parathyroid hormone (PTH) - which controls concentrations of calcium and phosphate in the blood. Cinacalcet is a calcimimetic agent which directly lowers PTH levels by increasing the sensitivity of the calcium sensing receptor to extracellular calcium. The goals of treatment are to lower levels of PTH, maintain serum calcium and phosphate levels, in order to prevent progressive bone resorption and the systemic consequences of deranged serum calcium and phosphate.

#### Licensed indications:

- Treatment of secondary HPT in patients with end stage renal disease on dialysis therapy.
- Reduction of hypercalcaemia in patients with either parathyroid carcinoma, or primary HPT in whom parathyroidectomy is not possible/appropriate.

#### Adult dosage and administration:

Dose adjustments if necessary are made every 2-4 weeks. Cinacalcet should be taken with food or shortly after a meal.

#### Secondary HPT in patients with end stage renal disease

The recommended starting dose is 30mg orally once daily. Although this may be titrated to a maximum of 180mg once daily, the usual maintenance dose is 30mg once daily. Some renal units may recommend a maintenance dose of 30mg three times weekly.

#### Primary HPT

The recommended starting dose is 30mg twice a day. This can be titrated to a maximum of 90mg four times a day according to response.

**Available as:** Cinacalcet 30mg, 60mg and 90mg tablets.

### Monitoring

Baseline tests are carried out in secondary care as part of the initial diagnosis and management. Responsibility for ongoing PTH, serum calcium and phosphate monitoring is as below. Patients with renal disease are monitored in care secondary whilst attending for dialysis.

Test	Renal (all monitoring in secondary care)	Endocrinology (PTH monitored in secondary care, calcium and phosphate monitored in primary care)
PTH	Every 1-4 weeks after initiation or dosage adjustment. Then every 1-3 months.	When required at the specialist's discretion.
Serum Calcium and phosphate	Within 1 week of initiation or dosage adjustment. Then every month.	Within 1 week of initiation or dosage adjustment. Then every 2-3 months.

## Hospital Specialist Responsibilities

- Arrange shared care with the patient's GP.
- Provide patient/carer with relevant (preferably written) information on use, side-effects and need for monitoring of medication.
- Provide shared care monitoring record booklet if required.
- Provide the GP with relevant information for each patient including treatment to be undertaken by GP (dose, any dose adjustments etc) and system of monitoring.
- Monitor response to treatment as described above. **The specialist will advise the GP on any dose adjustment required.**
- Agree to review patient's condition when requested by the patient's GP.
- Review the treatment regularly and send a written summary to the GP.
- Provide other advice or information on cinacalcet therapy which the GP feels is required.
- Advise the patient to inform the specialist of any change in their smoking status.

## GP Responsibilities

- Prescribe cinacalcet according to dose advised by specialist.
- Monitor serum calcium and phosphate (endocrinology patients only).
- Adjust the dose as advised by the specialist.
- Report to and seek advice from the specialist on any aspect of patient care that is of concern and may affect treatment.
- Stop treatment in presence of symptomatic hypocalcaemia, or other adverse event.
- Report adverse drug reactions to initiating specialist and usual bodies (e.g. MHRA).
- Ensure no drug interactions with other medicines.

## Adverse Effects, Precautions and Contraindications

### Relatively common adverse effects include:

- Nausea, vomiting, dizziness, paraesthesia, reduced testosterone concentrations, rash, myalgia, asthenia.
- Hypocalcaemia. A reduction in serum calcium is part of the pharmacological effect of cinacalcet, however, symptomatic hypocalcaemia may occur.

**Less common side effects include:** seizures, hypotension and heart failure.

**Use in hepatic impairment:** use cautiously in patients with moderate to severe hepatic impairment; there is potential for 2-4 fold higher plasma levels of cinacalcet in these patients.

**Pregnancy and Breastfeeding:** there are no clinical data from the use of cinacalcet during pregnancy. Use should only be considered if the potential benefit justifies the potential risk to the foetus. Cinacalcet is contraindicated in breastfeeding mothers.

## Common Drug Interactions

Dose adjustment of cinacalcet may be required if a patient receiving cinacalcet initiates or discontinues therapy with a strong CYP3A4 inhibitor (e.g. ketoconazole, itraconazole, telthromycin, voriconazole, ritonavir) or strong inducer (e.g. rifampacin).

Cinacalcet may increase the exposure to medicines predominantly metabolised by CYP2D6 (e.g. flecainide, propafenone, metoprolol, desipramine, nortriptyline, clomipramine). Dose adjustment may also be necessary if a patient starts or stops smoking.

## Communication

For any queries relating to this patient's treatment with cinacalcet, please contact the specialist named at the top of this document.

This information is not inclusive of all prescribing information and potential adverse effects.  
Please refer to full prescribing data in the SPC or the BNF