West Yorkshire Health and Care Partnership

AMBER GUIDANCE

Cinacalcet for Primary Hyperparathyroidism in adults

Specialist responsibilities - key points see *detailed responsibilities section 16 for further information if needed*

- Diagnose the patient; ensure that this diagnosis is communicated to primary care.
- Discuss the benefits and risks of the treatment with the patient and provide the appropriate counselling to enable the patient to reach an informed decision. Provide the patient with relevant information including duration of treatment, adverse effects and how to manage. Also when to seek urgent care and any circumstances where treatment should be stopped.
- Assess for contraindications, cautions and interactions.
- Conduct required baseline investigations and initial monitoring (see section 8).
- Prescribe treatment for a minimum of 4 weeks
- Send information to the patient's GP practice detailing the current and ongoing dose, any relevant test results and when the next monitoring is required.
- Provide advice and review treatment if a woman becomes or wishes to become pregnant.
- Provide advice to primary care on the management of adverse effects if required.
- Advise primary care if treatment should be discontinued.

Primary care responsibilities key points: see *detailed responsibilities section 17 for further information if needed*

- Respond to the specialist in writing within 2 weeks if unwilling to take over prescribing and monitoring as requested by specialist.
- If accepted, prescribe ongoing treatment as detailed in the specialists request
- Adjust the dose of cinacalcet as advised by the specialist.
- Conduct the required monitoring (see section 9)
- Assess for possible interactions when starting new medicines.
- Manage any adverse effects and discuss with specialist team when required.
- Seek advice from the specialist if the patient becomes or plans to become pregnant.
- Stop treatment as advised by the specialist.
- Encourage patients to ask questions about their medicines.

Patient and/or carer responsibilities

- To agree and accept responsibility for taking cinacalcet as prescribed.
- To understand how to take this medicine safely.
- To understand the duration of treatment prescribed initially by the hospital specialist.
- To understand the most common adverse events/side effects and inform the Specialist/GP as soon as reasonably possible should they occur and significantly affect the use of the medicines.
- To understand the circumstances under which the medicines should be immediately stopped and what action to take.
- To understand contents of written information provided by the Specialist and in the patient information leaflet supplied with the medicines and to seek clarification if required.
- To attend for blood tests/disease monitoring on time.
- To check with the community pharmacist that there are no interactions with cinacalcet, and other medications taken including other prescribed medications, medicines bought over the counter and herbal/homoeopathic products.
- To check with dentists or other specialists who may prescribe medicines that there are no interactions with cinacalcet.
- To contact the GP, Specialist or Medicines Information patient helpline if further information or advice is needed about this medication or if there is anything they do not understand. More information on asking about medication can be found in the Me & My Medicines Charter https://meandmymedicines.org.uk/the-charter/
- Use an appropriate form of contraception, as agreed with their doctor/nurse/sexual health service.

- Inform the specialist or primary care prescriber immediately if they become pregnant or wish to become pregnant.
- The NHS Website – NHS link, information on health link and medicines link

Contents

1. Background/ Introduction	Primary hyperparathyroidism is a common disorder that is often diagnosed as a result of biochemical screening or as part of evaluation of decreased bone mass. It is normally seen with hypercalcaemia. Patients with symptomatic primary hyperparathyroidism should have surgery as parathyroidectomy is the only cure. This guidance is for patients who need cinacalcet as they are unsuitable/unfit for surgery. Cinacalcet is a calcimimetic that increases the sensitivity of the calcium sensing receptor on the parathyroid to extracellular calcium, thereby inhibiting parathyroid hormone (PTH) secretion. The inhibition of PTH secretion then leads to a reduction in calcium levels. **This medicine requires significant ongoing monitoring which may include blood tests.** **This drug must be initiated by a specialist who must be a prescriber with relevant expertise. For this guidance specialists may include endocrinology and/or endocrine surgery consultants or registrars. Subsequent changes in drug treatment may be recommended by non-prescribers with the relevant competency working with the specialist MDT in accordance with clinical guidelines and best practice.** ***Consult the BNF, BNFC and SPC for full and current prescribing information.***

2. Indications **(Please state whether licensed or unlicensed or unlicensed use of a licensed product)**	For the reduction of hypercalcaemia in patients with primary hyperparathyroidism for whom parathyroidectomy would be indicated on the basis of serum calcium levels, but in whom parathyroidectomy is not clinically appropriate, or is contraindicated. Unlicensed use of a licensed medicine. Use supported by NICE NG 132.	
3. **Locally agreed off-label use**	Nil	
4. Contraindications and cautions This section will link to the SPC for licensed medicines. For unlicensed medicines then information would be added.	See SPC link	
5. Initiation and ongoing dose regimen	See clinic referral letter for recommended dose for particular patient. The licensed recommended starting dose is 30 mg twice a day. A significant number of patients can be managed on 30 mg once daily. If it is tolerated and patient remains symptomatic, dose will be increased to 30mg twice daily. The dosage should be titrated every 2 to 4 weeks through sequential doses of 30 mg twice daily, 60 mg twice daily, 90 mg twice daily, and 90 mg three or four times daily as necessary to reduce serum calcium concentration to or below the upper limit of normal. The maximum dose used in clinical trials was 90 mg four times daily. GP's will not be asked to titrate dose; this is for information only.	
6. Pharmaceutical aspects If a medicine needs to be prescribed by brand /formulation information will be included in this section.	Route of administration:	Oral
	Other important information:	It is recommended that cinacalcet be taken with food or shortly after a meal, as studies have shown that bioavailability of cinacalcet is increased when taken with food
7. Significant medicine interactions For a comprehensive list consult the BNF or Summary of Product Characteristics. SPC	**Link to SPC (for licensed medicines)**	
8. Baseline investigations, routine tests/monitoring and follow up The duration of treatment & frequency of review will be determined by the specialist, based on clinical response and tolerability.	**Baseline investigations:** • Calcium and bone profile • Vitamin D • U&Es • Parathyroid hormone (PTH) • Monitoring at baseline is the responsibility of the specialist. **Routine tests/ monitoring:** • Calcium and bone profile • U&Es	

<table>
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Parathyroid hormone (PTH)
Bone mineral density (DEXA)
Ultrasound scan on the renal tract

Follow up: Frequency of the routine tests / disease monitoring will be specified by the hospital specialist and individualised to the patient.
The GP will perform the ongoing blood tests. The specialist will assess the response to therapy and advise the GP on any subsequent adjustments of dose if required.
There may, however, be occasions when a patient has been put on therapy and monitored over a period of time could be discharged to the care of the GP with a treatment plan, with the option of the GP re-referring should any problems occur. This treatment plan will include the monitoring and frequency of testing that is required for the patient plus actions to be taken in light of any abnormal results.
Serum calcium will be measured within 1 week after initiation, or dose adjustment, of cinacalcet. Once maintenance dose levels have been established, serum calcium will be measured (at the hospital) every 2 to 3 months. After titration to the maximum dose of cinacalcet required, serum calcium will be periodically monitored; if clinically relevant reductions in serum calcium are not maintained, discontinuation of cinacalcet therapy would be considered.
</td></tr>
<tr><td rowspan="2">9. Ongoing monitoring requirements to be undertaken by primary care.

See section 10 for further guidance on management of adverse effects/ responding to monitoring results.</td><td>Monitoring</td><td>Frequency</td></tr>
<tr><td>• Calcium and bone profile
• U&Es
• Parathyroid hormone (PTH)</td><td>Once cinacalcet dose stable then calcium levels would usually be checked every 3-6 months.
(See specialist letter)</td></tr>
<tr><td rowspan="6">10. Adverse effects and managements

Where relevant add information regarding at what point GPs should refer back to the specialist or note that GPs should manage in line with usual Primary Care practice.</td><td>Result</td><td>Action for GP</td></tr>
<tr><td>Calcium (total serum) <2.2 mmol/L</td><td>Stop the medication and refer back to the specialist</td></tr>
<tr><td>Calcium (total serum) >3.0 mmol/L</td><td>Seek urgent specialist advice</td></tr>
<tr><td>The patient has significant ongoing symptoms of hypercalcaemia.</td><td>Seek urgent specialist advice</td></tr>
<tr><td colspan="2">Management of abnormal test results:

Any abnormal test results ordered by the specialist will be managed by secondary care. For any monitoring undertaken by the GP, see above or individual letter for the patient on management</td></tr>
<tr><td>Adverse event</td><td>Action to be taken</td></tr>
<tr><td>Any signs of paraesthesia, myalgias, cramping, tetany,</td><td>Stop drug -seek specialist advice</td></tr>
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	prolonged QT, arrhythmia, and convulsions	
	Worsening liver function	Stop drug -seek specialist advice
	Hypersensitivity, rash	Stop drug -discuss with specialist advice
	Dyspepsia, decreased appetite, anorexia. Constipation or diarrhoea. Dizziness or headaches. Worsening heart failure, hypotension, chest infection, cough, dyspnoea	Provide symptomatic relief if symptoms persist refer back to specialist
	Asthenia	If persistent consult specialist
	In the controlled studies conducted so far, the most commonly reported undesirable effect was nausea and vomiting. This was mild to moderate in severity and transient in nature in the majority of patients. It generally didn't require cessation of treatment. **Any serious adverse reactions should be reported to the MHRA via the Yellow Card scheme** www.mhra.gov.uk/yellowcard	
11. Advice to patients and carers The specialist will counsel the patient with regard to the benefits and risks of treatment and will provide the patient with any relevant information and advice.	**The patient should be advised to report any of the following signs or symptoms to their GP without delay:** • Signs of hypocalcaemia: paraesthesias, myalgias, cramp, tetany, and convulsions	
12. Pregnancy, paternal exposure and breast feeding	**Link to SPC** It is the responsibility of the specialist to provide advice on the need for contraception to male and female patients on initiation but the ongoing responsibility for providing this advice rests with both the GP and the specialist.	
13. Specialist contact information	See letter from specialist at the relevant hospital Trust	
14. To be read in conjunction with the following documents	Overview | Hyperparathyroidism (primary): diagnosis, assessment and initial management | Guidance | NICE NG132	
15. **Local arrangements for referral**	In line with this WY ICS Amber guidance document.	
16. Specialist responsibilities	• Ensure current diagnosis of condition and the treatment options have been discussed and understood by the patient and their carers where appropriate. • Ensure that the ongoing treatment has been agreed with and by the patient and carer where appropriate. • To assess the suitability of the patient for cinacalcet • To discuss the benefits and side effects of treatment with the patient/carer and where applicable the need for long term monitoring. • Checking for allergies, interactions and contra-indications. • To perform baseline tests. • To initiate treatment in agreement with the patient to include a discussion about unlicensed use as appropriate.	

	• To assess and monitor the patient's response to treatment before prescribing is transferred to primary care. • Write to the patient's General Practitioner (GP) to ask if they are willing to take over the prescribing and monitoring responsibilities under this amber drug guidance. • Providing information on dose to be prescribed and titration schedule. • To advise primary care what routine monitoring will be completed by the specialist. Note primary care monitoring is outlined in section 9. • To ensure results of monitoring are provided to primary care. • Outlining to primary care when therapy may be reduced and stopped assuming no relapse in patient's condition. Review periods to be agreed. • Ensure this is also known, understood and agreed with the patient (and where appropriate their carers). • Responding promptly to issues raised by the GP/primary care and informing the patient (and carers) of any material changes to any advice or agreements made at the outset. • To monitor the patient for adverse events/side effects and report to the GP and where appropriate Commission on Human Medicines/MHRA (Yellow card scheme). • Discuss with the patient their responsibilities outlined below, confirm understanding and confirm that the patient is happy to adhere to them.

17. Primary Care prescriber responsibilities	• Ensure the specialist is notified within 2 weeks if unwilling to undertake prescribing and monitoring when requested • Checking for allergies, interactions and contra-indications when taking over prescribing and when changing or initiating new treatments • To prescribe drug cinacalcet and adjust the dose as recommended by the specialist following initiation by the specialist. • Monitoring the patient's overall health and wellbeing, observing patient for evidence of ADRs and liaising with specialist clinician if necessary and where appropriate report to Commission on Human Medicines/MHRA (Yellow card scheme). • Routine disease monitoring should continue. • When patient attends for review of treatment confirm, in line with the information already provided, by the specialist (or other specialist acting on their behalf) the circumstances under which the medicines should be immediately stopped and what actions the patient is to take. • To ensure that there is an agreed process in place for accessing the ongoing supply of the medicines that is not placing any unnecessary burden or workload on the patient or their carers. • Ensuring advice is sought from the responsible specialist clinician if there is any significant change in the patient's physical health status that may affect prescribing or appropriateness of the amber medicine, or any information relevant to their care that becomes available that was not made available at the time of the specialist diagnosis and treatment option agreement. • Take reasonable steps to ensure that the patient is using their medicines as prescribed and intended, i.e., include amber medication as part of medication review. • Inform the specialist team if the patient repeatedly does not attend routine blood monitoring and agree an action plan. • Reducing/stopping treatment in line with specialist clinician's original request • Encourage the patient at medication review appointments to ask questions and raise any concerns they have about their treatment, particularly anything that may be affecting their adherence to treatment. Use the Me & My Medicines Charter - https://meandmymedicines.org.uk/the-charter/.