Lanreotide

Endocrinology Shared Care Guideline

Introduction
Lanreotide is an analogue of natural hypothalamic release-inhibiting hormone, somatostatin. Like somatostatin it is an inhibitor of various endocrine, neuroendocrine, exocrine and paracrine functions.

Licensed indications: Acromegaly, neuroendocrine (particularly carcinoid) tumours, TSH-omas (the Autogel preparation is not licensed for TSH-omas)

Adult Dosage and Administration
Lanreotide Autogel:
- Acromegaly and neuroendocrine tumours: Administered by deep subcutaneous injection, into the superior, external quadrant of the buttock. (Or the upper outer thigh if the patient is self-administering). Usually 60mg-120mg Autogel every 28 days. Thereafter, the dose is adjusted according to the patient response and monitoring results.

Lanreotide LA:
- Acromegaly and neuroendocrine tumours: Initially 30 mg every 14 days, increased to 30 mg every 7-10 days, adjusted according to response
  - TSH-omas: 30mg every 10-14 days.

Available as:
Lanreotide depot preparation. 60mg, 90mg, 120mg. Pre-fill syringe
Lanreotide long acting preparation- 30mg. Powder for reconstitution (with solvent supplied).

Hospital Specialist Responsibilities
Baseline tests:
- Hormone levels: IGF-1, GH, Thyroid function,
- Baseline ultrasonic examination of the gallbladder is recommended if indicated.

- Diagnose the condition and assess if the patient is suitable for treatment with lanreotide.
- Arrange shared care with the patient’s GP.
- Provide patient/carer with relevant written information on use, side-effects and need for monitoring of medication.
- Undertake the baseline tests and communicate to the GP that these have been done.
- Review results of safety monitoring and request additional tests as required.
- Monitor response to treatment from hormone levels at each review appointment and need to continue therapy.
- Continue to review the patient at agreed specified intervals, sending a written summary to the GP whenever the patient is reviewed.
- Provide any other advice or information for the GP if required.
GP Responsibilities

- Prescribe lanreotide; continued prescribing is appropriate for patients attending regular review.
- Adjust the dose as advised by the specialist.
- Report adverse drug reactions to initiating specialist and usual bodies (e.g. CHM, MHRA).
- Ensure no significant drug interactions with other medicines.

Adverse Effects, Precautions and Contraindications

Caution with:

- **Bradycardia**: In patients without underlying cardiac problems lanreotide may lead to a decrease of heart rate without necessarily reaching the threshold of bradycardia. In patients suffering from cardiac disorders prior to lanreotide treatment, sinus bradycardia may occur. Care should be taken when initiating treatment with in patients with bradycardia. Concomitant administration of bradycardia-inducing drugs (e.g. beta blockers) may have an additive effect on any associated slight reduction of heart rate. Dose adjustments of such concomitant medications may be necessary.
- **Gallstone formation**: Lanreotide may reduce gall bladder motility and may lead to gallstone formation in long-term recipients.
- **Altered glucose regulation**: Due to possible inhibitory effects on secretion of insulin and glucagon (both hyperglycaemia and more rarely hypoglycaemia have been reported) In patients with concomitant diabetes mellitus; monitoring of glucose tolerance is recommended and adjustment of antidiabetic therapy may be necessary.
- **Tumour expansion**: can occur during treatment (e.g. possible visual field defects)

Commonly reported side effects: Abdominal pain; anorexia; bloating; diarrhoea; flatulence; gallstones (after long-term treatment); gastro-intestinal disturbances; hyperglycaemia (with chronic administration); hypoglycaemia; impaired postprandial glucose tolerance (with chronic administration); irritation at the injection site; nausea; pain at the injection site; steatorrhoea; vomiting.

Pregnancy: should only be used if potential benefit outweighs risk.
Breast feeding: Caution should be exercised when lanreotide is administered during lactation.

Common Drug Interactions

Use lanreotide with caution in association with:

- **Ciclosporin**: may cause plasma concentration to be reduced
- The intestinal absorption of co-administered drugs may be affected.
- **Concomitant administration of bradycardia-inducing drugs (e.g. beta blockers)**: may have an additive effect on the slight reduction of heart rate associated with lanreotide. Dose adjustments of such concomitant medications may be necessary.
- Lanreotide may decrease the metabolic clearance of compounds known to be metabolised by Cytochrome P450 enzymes, other medications mainly metabolized by CYP3A4 and which have a low therapeutic index (e.g. quinidine, terfenadine) should therefore be used with caution.

Communication

For any queries relating to this patient’s treatment with lanreotide, 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

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