

## Guideline on Prescribing of Gonadorelin Analogues and Gonadotrophin Releasing Hormone Antagonists in the treatment of Prostate Cancer

### 1. BACKGROUND

Metastatic cancer of the prostate usually responds to hormonal treatment aimed at androgen depletion. Standard treatments include use of a gonadorelin analogue, as an alternative to surgery.

The gonadotrophin releasing hormone antagonist, degarelix, is used to treat advanced hormone-dependent cancer. It is preferred option in patients in whom tumour “flare” (associated with initial treatment with gonadorelin analogue) is anticipated to cause problems (see below).

### 2. INDICATION

#### Gonadorelin Analogues

- Locally advanced prostate cancer
- Adjuvant treatment to radiotherapy or radical prostatectomy in patients with high risk localised or locally advanced prostate cancer
- Neoadjuvant treatment prior to radiotherapy in patients with high risk localised or locally advanced prostate cancer
- Metastatic prostate cancer

#### Gonadotrophin Releasing Hormone Antagonists (Degarelix) **Amber drug – see shared care framework**

- Symptomatic, advanced metastatic, high PSA prostate cancer patients who are at risk of impending spinal cord compression or ureteric obstruction

### 3. DOSE AND DURATION OF TREATMENT WITH GONADORELIN ANALOGUES

Patients should be prescribed a licensed treatment, with the lowest acquisition cost. Consideration should be given to using six monthly preparations to reduce primary care attendance.

Drug Name	Trade name	Monthly dose	Three monthly dose	Six monthly dose
Goserelin	Zoladex	3.6mg	10.8mg (Zoladex LA®)	N/A
Leuprorelin	Prostap	3.75 mg (Prostap SR DCS®)	11.25mg (Prostap 3 DCS®)	N/A
Triptorelin	Decapeptyl SR®	3mg	11.25mg	22.5mg

Injection sites should be changed each time.

#### **4. CONTRAINDICATIONS AND CAUTIONS**

Treatments are contraindicated in known severe hypersensitivity to the active substance or to any of the excipients of the product

Patients at risk of ureteric obstruction or spinal cord compression should be considered carefully and closely supervised in the first few weeks of treatment with gonadorelin analogues. These patients should be considered for treatment with degarelix or prophylactic treatment with anti-androgens

## 5. ADVERSE EFFECTS

The patient should be advised to report any of the following signs or symptoms to their GP without delay:

Low mood:

Increased risk of incident depression when undergoing treatment with LHRH analogues. Patient's should be informed accordingly and treated as appropriate if symptoms occur.

Headache/vomiting/visual impairment:

Rarely, treatment with LHRH analogues may reveal the presence of a previously unknown gonadotroph cell pituitary adenoma. These patients may present with sudden headache, vomiting, visual impairment and ophthalmoplegia.

Symptoms of hyperglycaemia:

Reduction of glucose tolerance may occur and manifest as diabetes or loss of glycaemic control

Adverse event	Action to be taken
Cardiac failure, Myocardial infarction	Standard 1 <sup>ry</sup> & 2 <sup>ndry</sup> care management. Inform Specialist.
Glucose tolerance impaired	Standard primary care management. Inform Specialist.
Blood pressure abnormal	Standard primary care management. Inform Specialist.
Weight gain	Standard primary care management. Inform Specialist.
Sleep disorder	Standard primary care management. Inform Specialist.
Mood changes/depression	Standard primary care management. Inform Specialist.
Erectile dysfunction	Standard primary care management. Inform Specialist.
Decreased libido	Standard primary care management. Inform Specialist.
Injection site reaction	Rotate injection site. Consider alternate LHRH analogue. Inform Specialist.
Bone pain	Clinical assessment. X-Ray if appropriate. Inform Specialist.
Headache	Standard primary care management. Inform Specialist.
Hot flushes	Inform Specialist.
Hyperhidrosis	Inform Specialist.
Paraesthesia	Inform Specialist.
Gynaecomastia	Inform Specialist.
Rashes	Standard primary care management. Inform specialist

in patients with pre-existing diabetes who are receiving LHRH agonists. Monitoring of blood glucose should be considered.

#### Worsening Urinary Symptoms/Bone pain:

Patients may experience a temporary worsening of their prostate cancer (tumour flare), usually manifested by an increase in urinary symptoms and metastatic pain which can be managed symptomatically. These symptoms are usually transient and usually disappear in 1-2 weeks.

## 6. INTERACTIONS

No recognised drug interactions reported

**Details of contraindications, cautions, drug interactions and adverse effects listed for all drugs above are not exhaustive. For further information always check with BNF [www.bnf.org.uk](http://www.bnf.org.uk) or SPC ([www.medicines.org.uk](http://www.medicines.org.uk)).**

## 7. MONITORING

Baseline: U&Es, FBC and PSA levels.

During treatment: PSA levels should be monitored by the specialist on a six monthly basis, increased to 3 monthly if rise in PSA levels > 20%.

(Phlebotomy may be requested by specialist – results will be reviewed by specialist.)

If the GP suspects the patient is experiencing ureteric obstruction or spinal cord compression the hospital specialist should be contacted.

The GP should refer promptly to hospital specialist when any loss of clinical efficacy occurs, if disease progression suspected.

## 8. INFORMATION TO THE PATIENT

Patients should be informed of risks and benefits of treatment, including frequency of administration, side effects of treatment, symptoms which should be reported to clinician.

## 9. RESPONSIBILITIES

Stage of Treatment	Hospital Team Responsibilities	GP Responsibilities
Initiation	Assess suitability for treatment and recommend that treatment is initiated  Provide information to patient on treatment required	Initiate treatment following advice of specialist team
Maintenance	Monitor response to treatment and advise GP of necessary changes to therapy.  Evaluation of ADRs reported by the GP.	Monitor patient for adverse effects and report to specialist team where necessary.  Liaise with the hospital team in the event of intolerance to therapy, disease progression or loss of efficacy.

**Contact details:**

During Office hours: Specialist as per clinic letter

Out of hours: On-call registrar for Urology (via switchboard – 01482 875875).

**APPROVAL PROCESS**

<b>Written by:</b>	Marie Miller, Interface Pharmacist; updated September 2021 by Jane Morgan, Interface Pharmacist
<b>Consultation process:</b>	Urology team HUTH
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