Goserelin 10.8mg Therapy- 12 weeks

INDICATIONS FOR USE:

INDICATION	ICD10	Regimen Code	Reimbursement Status
Treatment of locally advanced or metastatic hormone sensitive prostate cancer	C61	00477a	CDS

TREATMENT:

Goserelin 10.8mg is injected subcutaneously into the anterior abdominal wall once every 12 weeks until disease progression or unacceptable toxicity develops.

Day	Drug	Dose	Route	Diluent & Rate	Cycle
1	Goserelin	10.8mg	SC	n/a	Every 12 weeks
Use extra care when administering goserelin to patients with a low BMI and/or who are receiving full anticoagulation medication					

ELIGIBILITY:

- Indications as above

EXCLUSIONS:

- Hypersensitivity to goserelin or any of the excipients

PRESCRIPTIVE AUTHORITY:

The treatment plan must be initiated by a Consultant with expertise in the treatment of prostate carcinoma.

TESTS:

Baseline tests:

- FBC, renal and liver profile as clinically indicated
- Bone profile
- Blood glucose

Regular tests:

- FBC, renal and liver profile
- Blood glucose and bone profile as clinically indicated

Disease monitoring:

Disease monitoring should be in line with the patient's treatment plan and any other test/s as directed by the supervising Consultant.

DOSE MODIFICATIONS:

- No recommended dose modifications.

Table 1: Dose modification of goserelin in renal and hepatic impairment

Renal Impairment	Hepatic Impairment
No dose modification necessary	No dose modification necessary

SUPPORTIVE CARE:

EMETOGENIC POTENTIAL: Minimal (**Refer to local policy).**

PREMEDICATIONS: None

OTHER SUPPORTIVE CARE:
Calcium and vitamin D supplementation **(Refer to local policy)**

ADVERSE EFFECTS / REGIMEN SPECIFIC COMPLICATIONS

The adverse effects listed are not exhaustive. Please refer to the relevant Summary of Product Characteristics for full details.

- **Tumour Flare:** Luteinizing hormone-releasing hormone (LHRH) agonists (e.g. goserelin, leuprorelin and triptorelin) can cause short-term (2 to 3 weeks) stimulation of testosterone before suppression of androgen production, which may cause new or worsening signs and symptoms e.g. increased bone pain. This syndrome can be prevented by administering an antiandrogen 1 to 2 weeks before first dose of gonadotrophin releasing hormone agonists and continuing for approximately 1 month in total.
- The use of goserelin in men at particular risk of developing ureteric obstruction or spinal cord compression should be considered carefully and the patients monitored closely during the first month of therapy. If spinal cord compression or renal impairment due to ureteric obstruction are present or develop, specific standard treatment of these complications should be instituted.
- **Bone Mineral Density:** The use of LHRH agonists may cause reduction in bone mineral density. In men, preliminary data suggest that the use of a bisphosphonate in combination with an LHRH agonist may reduce bone mineral loss. Particular caution is necessary in patients with additional risk factors for osteoporosis (e.g. chronic alcohol abusers, smokers, long-term therapy with anticonvulsants or corticosteroids, family history of osteoporosis).
- **Glucose Tolerance:** A reduction in glucose tolerance has been observed in males receiving LHRH agonists. This may manifest as diabetes or loss of glycaemic control in those with pre-existing diabetes mellitus. Consideration should therefore be given to monitoring of blood glucose levels in patients receiving a LHRH agonist.

DRUG INTERACTIONS:

- Since androgen deprivation treatment may prolong the QT interval, the concomitant use of goserelin with medicinal products known to prolong the QT interval or medicinal products able to induce Torsade de pointes should be carefully evaluated
- Current drug interaction databases should be consulted for more information.

ATC CODE:

Goserelin L02AE03

REFERENCES:

1. Loblaw DA, Virgo KS, Nam R, et al. Initial hormonal management of androgen-sensitive metastatic, recurrent, or progressive prostate cancer: update of an American Society of Clinical Oncology practice guideline. J Clin Oncol 2006;25(12):1596-1605
2. Zoladex ® Summary of Product Characteristics Accessed May 2020. Available at https://www.hpra.ie/img/uploaded/swedocuments/Licence_PA1019-027-002_20062019122218.pdf

Version	Date	Amendment	Approved By
1	30/05/2018		Prof Maccon Keane
2	10/06/2020	Regimen review	Prof Maccon Keane

Comments and feedback welcome at oncologydrugs@cancercontrol.ie.