**INDICATIONS FOR USE:**

<table>
<thead>
<tr>
<th>INDICATION</th>
<th>ICD10</th>
<th>Regimen Code</th>
<th>*Reimbursement Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment of locally advanced or metastatic hormone sensitive prostate cancer</td>
<td>C61</td>
<td>00478a</td>
<td>CDS</td>
</tr>
</tbody>
</table>

*If the reimbursement status is not defined*, the indication has yet to be assessed through the formal HSE reimbursement process.

**TREATMENT:**

Goserelin 3.6mg is injected subcutaneously into the anterior abdominal wall once every 28 days until disease progression or unacceptable toxicity develops.

<table>
<thead>
<tr>
<th>Day</th>
<th>Drug</th>
<th>Dose</th>
<th>Route</th>
<th>Diluent &amp; Rate</th>
<th>Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Goserelin</td>
<td>3.6mg</td>
<td>SC</td>
<td>n/a</td>
<td>Every 28 days</td>
</tr>
</tbody>
</table>

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
- Bone profile
- Blood glucose

**Regular tests:**
- FBC, renal and liver profile as clinically indicated
- 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

<table>
<thead>
<tr>
<th>Renal Impairment</th>
<th>Hepatic Impairment</th>
</tr>
</thead>
<tbody>
<tr>
<td>No dose modification necessary</td>
<td>No dose modification necessary</td>
</tr>
</tbody>
</table>

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:

2. Zoladex® Summary of Product Characteristics Accessed April 2018 Available at http://www.medicines.ie/medicine/4776/SPC/Zoladex+3.6mg/#POSOLOGY

Comments and feedback welcome at oncologydrugs@cancercontrol.ie.