Leuprorelin 45mg Therapy- 24 week

INDICATIONS FOR USE:

<table>
<thead>
<tr>
<th>INDICATION</th>
<th>ICD10</th>
<th>Regimen Code</th>
<th>Reimbursement Status</th>
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</thead>
<tbody>
<tr>
<td>Treatment of hormone dependent advanced prostate cancer</td>
<td>C61</td>
<td>00491a</td>
<td>CDS</td>
</tr>
<tr>
<td>Treatment of high-risk localized and locally advanced hormone dependent prostate cancer in combination with radiotherapy</td>
<td>C61</td>
<td>00491b</td>
<td>CDS</td>
</tr>
</tbody>
</table>

TREATMENT:
Leuprorelin 45mg is injected subcutaneously once every 24 weeks until disease progression or unacceptable toxicity develops. The injected solution provides continuous release of leuprorelin acetate over a six-month period.

<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>Leuprorelin</td>
<td>45mg</td>
<td>SC</td>
<td>n/a</td>
<td>Every 24 weeks</td>
</tr>
</tbody>
</table>

ELIGIBILITY:
- Indications as above

EXCLUSIONS:
- Hypersensitivity to leuprorelin or any of the excipients
- As sole treatment in prostate cancer patients with spinal cord compression or evidence of spinal metastases

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 leuprorelin 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>
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</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.

- **Transient testosterone flare:** Leuprorelin acetate, like other gonadotrophin-releasing hormone (GnRH) agonists, causes a transient increase in serum concentrations of testosterone, dihydrotestosterone and acid phosphatase during the first week of treatment. Patients may experience worsening of symptoms or onset of new symptoms, including bone pain, neuropathy, haematuria, or ureteral or bladder outlet obstruction. These symptoms usually subside on continuation of therapy. Additional administration of an appropriate antiandrogen should be considered beginning 3 days prior to leuprorelin therapy and continuing for the first two to three weeks of treatment. This has been reported to prevent the sequelae of an initial rise in serum testosterone.

- 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 GnRH agonists may cause reduction in bone mineral density. In men, preliminary data suggest that the use of a bisphosphonate in combination with an GnRH 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:** Hyperglycaemia and an increased risk of developing diabetes have been reported in men receiving GnRH agonists. Hyperglycaemia may represent development of diabetes mellitus or worsening of glycaemic control in patients with diabetes. Monitor blood glucose and/or glycosylated hemoglobin (HbA1c) periodically in patients receiving a GnRH agonist and manage with current practice for treatment of hyperglycaemia or diabetes.

DRUG INTERACTIONS:

- Since androgen deprivation treatment may prolong the QT interval, the concomitant use of leuprorelin 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.
NCCP Chemotherapy Regimen

ATC CODE:
Leuprorelin L02AE02

REFERENCES:

<table>
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<tr>
<th>Version</th>
<th>Date</th>
<th>Amendment</th>
<th>Approved By</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>30/08/2018</td>
<td></td>
<td>Prof Maccon Keane</td>
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<tr>
<td>2</td>
<td>10/06/2020</td>
<td>Regimen review</td>
<td>Prof Maccon Keane</td>
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Comments and feedback welcome at oncologydrugs@cancercontrol.ie.