## Introduction

### General Statements
- Depending on the local agreements patients will either receive the first dose in secondary care, or the primary care prescriber will be asked to initiate therapy.
- The primary care prescriber must reply in writing to the request for shared care within two weeks if unwilling to participate.
- The responsibility for prescribing and monitoring must be documented clearly in the patient’s hospital and general practice notes.
- Shared care should only be considered when the patient’s clinical condition is stable or predictable.

### Indications

#### Goserelin (Zoladex®)
- Metastatic prostate cancer.
- Locally advanced prostate cancer, as an alternative to surgical castration.
- As adjuvant treatment to radiotherapy in patients with high-risk localised or locally advanced prostate cancer.
- As neo-adjuvant treatment prior to radiotherapy in patients with high-risk localised or locally advanced prostate cancer.
- As adjuvant treatment to radical prostatectomy in patients with locally advanced prostate cancer at high risk of disease progression.

#### Leuprorelin (Prostap®)
- Metastatic prostate cancer.
- Locally advanced prostate cancer, as an alternative to surgical castration.
- As an adjuvant treatment to radiotherapy in patients with high-risk localised or locally advanced prostate cancer.
- As an adjuvant treatment to radical prostatectomy in patients with locally advanced prostate cancer at high risk of disease progression.
- As neo-adjuvant treatment prior to radiotherapy in patients with high-risk localised or locally advanced prostate cancer.

#### Triptorelin (Decapeptyl®)
- Treatment of patients with locally advanced, non-metastatic prostate cancer, as an alternative to surgical castration.
- Treatment of metastatic prostate cancer.
- As adjuvant treatment to radiotherapy in patients with high-risk localised or locally advanced prostate cancer.
- As neoadjuvant treatment prior to radiotherapy in patients with high-risk localised or locally advanced prostate cancer.
- As adjuvant treatment to radical prostatectomy in patients with locally advanced prostate cancer.
advanced prostate cancer at high risk of disease progression.

**Degarelix (Firmagon®)**
- an option for treating advanced hormone-dependent prostate cancer in people with spinal metastases according to NICE TA404.

### Individuals Responsibilities

#### Hospital Specialist’s Responsibilities

<table>
<thead>
<tr>
<th>Initial prescribing</th>
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<tbody>
<tr>
<td>Consider current co-morbidities and risk factors for potential adverse effects eg. cardiovascular disease, fractures &amp; diabetes.</td>
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<tr>
<td>An anti-androgen will be prescribed two weeks before initiation of therapy, and if side effects are tolerable then a gonadorelin analogue can be administered. To prevent the testosterone “flare” an oral anti-androgen (e.g. bicalutamide 50mg daily) can be continued for two weeks following the first injection.</td>
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<tr>
<td>The first injection of goserelin, leuprorelin, triptorelin or degarelix will be given in the Uro-oncology clinic, or as agreed as local practice.</td>
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<table>
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<tr>
<th>Monitoring</th>
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<tr>
<td>Baseline FBC, U&amp;E, including LFTs &amp; prostate-specific antigen (PSA)</td>
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<tr>
<td>Monitor patients during the first month following initiation of gonadorelin analogue.</td>
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<tr>
<td>Clinical response to therapy, e.g. bone pain and performance status</td>
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<tr>
<td>Radiology and radio-isotopes (CT scans of abdomen and pelvis and bone scans may be performed)</td>
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<th>Communication</th>
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<tr>
<td>Responsibilities for timing and frequency of PSA monitoring to be communicated to primary care prescriber as this may differ between hospital trusts.</td>
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</table>

#### Primary Care Prescriber’s Responsibilities

- Primary care prescriber to inform hospital specialist if unwilling to undertake monitoring as requested.
- Long term prescribing and arrange administration of goserelin, leuprorelin, triptorelin or degarelix.
- PSA monitoring according to local shared care service arrangements (as communicated by hospital specialist).
- Refer promptly to hospital specialist when any loss of clinical efficacy occurs or disease progression suspected or if intolerance to therapy occurs.

#### Monitoring Required

- Monitor for adverse effects of drug therapy.
- Patients with diabetes may require more frequent monitoring of blood glucose.
- PSA every 3 months, or as specified by hospital specialist (responsibility for PSA monitoring as per local shared care service arrangements). Patient to be reviewed by Uro-oncology service if:
  - patient has symptoms
  - if PSA doubles from baseline levels
  - if there are 2 consecutive increases in PSA
Shared Care Guideline for Gonadorelin analogues (Goserelin, Leuprorelin, Triptorelin and Degarelix) in Prostate Cancer

<table>
<thead>
<tr>
<th>Information given to the patient</th>
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<tbody>
<tr>
<td>Patients will be provided with appropriate patient information leaflets.</td>
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<tr>
<td>Patient Information Leaflets for the use of these drugs may be available directly from the manufacturers</td>
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</tbody>
</table>

Contact Details
Documented in letter from specialist care to primary care prescriber.

Product Information
The information in this Shared Care Guideline should be used in conjunction with the latest edition of the BNF and Summary of Product Characteristics.

Dosage
Therapy should be continuous, even if patient is in remission, unless specified by the hospital specialist. Some patients may benefit from a ‘hormone holiday’ or intermittent therapy which can give relief from side effects but this should only be undertaken following specialist advice.

Information on administration of these products can be obtained from the relevant manufacturer.
- No dosage adjustment is necessary for patients with renal or hepatic failure. Degarelix has not been studied in patients with severe liver or kidney impairment and so caution is necessary.
- Dispose of used syringes in a sharps bin
- Always refer to package insert for full details on administration.

Goserelin (Zoladex and Zoladex LA)
- Zoladex (Goserelin 3.6mg) depot injected subcutaneously (SC) into the anterior abdominal wall every 28 days, or
- Zoladex LA (Goserelin 10.8mg MR) depot injected SC into the anterior abdominal wall every 12 weeks.

Preparation and storage:
- Implant, in pre-filled syringe

Leuprorelin (Prostap SR DCS and Prostap 3 DCS)
- Prostap SR DCS (Leuprorelin 3.75mg) depot administered by SC or intramuscular injection (IM) every 28 days, or
- Prostap 3 DCS (Leuprorelin 11.25mg MR) depot administered by SC injection every 3 months.

Preparation and storage:
- Powder and solvent for suspension for injection, sustained release formulation – requiring reconstitution before injecting.

Triptorelin (Decapeptyl SR 3mg, SR 11.25mg or SR 22.5mg)
- Decapeptyl SR 3mg – IM injection every 4 weeks (28 days)
- Decapeptyl SR 11.25mg – IM injection every 3 months
- Decapeptyl SR 22.5mg – IM injection every 6 months

Preparation and storage:
- Powder and solvent for suspension for injection, sustained release formulation – requiring reconstitution before injecting.

Degarelix (Firmagon 80mg or 120mg)
### Preparation and storage

- Powder and solvent for injection – requiring reconstitution before injecting.

### Starting dose:
- Two consecutive injections of 120mg each.
- Maintenance: 80mg SC monthly.

### Serious Adverse Effects
Refer to the current BNF and [https://www.medicines.org.uk/emc/](https://www.medicines.org.uk/emc/) for complete and up to date information.

### Precautions and Contra-indications
Refer to the current BNF and [https://www.medicines.org.uk/emc/](https://www.medicines.org.uk/emc/) for complete and up to date information.

### Clinically relevant Drug Interactions and their management
Refer to the current BNF and [https://www.medicines.org.uk/emc/](https://www.medicines.org.uk/emc/) for complete and up to date information.

These medicines may either be prescribed on a FP10 and dispensed at a pharmacy, or a primary care prescriber may claim re-imbursement through NHS Prescription Services under the terms of the statement of fees and allowances (paragraph 44.4), if purchased by the practice.