

## BC Cancer Protocol Summary for Therapy for Prostate Cancer Using LHRH Agonist (Goserelin, Leuprolide or Buserelin)

**Protocol Code**

GUPLHRH

**Tumour Group**

Genitourinary

**Contact Physician**

*Dr C. Kollmannsberger*

### ELIGIBILITY:

- Locally advanced\* or metastatic prostate adenocarcinoma in patients who decline orchiectomy
- Locally advanced\* prostate adenocarcinoma in combination with radiation therapy or brachytherapy

\* Local disease with high risk features (see Cancer Management Guidelines)

### Mechanism of Action

LHRH agonists are synthetic analogs of gonadotropin-releasing hormone and act mainly on the pituitary gland in humans. Continuous treatment produces initial stimulation (3-4 days) then suppression of hormones to castrate levels. In males, the reduction of testosterone to castrate levels occurs within 2-4 weeks.

### TREATMENT OPTIONS:

|                                     |   |
|-------------------------------------|---|
| goserelin acetate                   | <ul style="list-style-type: none"> <li>▪ 3.6 mg SC every month <b>or</b></li> <li>▪ 10.8 mg SC every 3 months</li> </ul>  |
| leuprolide acetate<br><br>(LUPRON®) | <ul style="list-style-type: none"> <li>▪ 7.5 mg IM every month, <b>or</b></li> <li>▪ 22.5 mg IM every 3 months, <b>or</b></li> <li>▪ 30 mg IM every 4 months, <b>or</b></li> </ul>                                    |
| (ELIGARD®)                          | <ul style="list-style-type: none"> <li>▪ 7.5 mg SC every month, <b>or</b></li> <li>▪ 22.5 mg SC every 3 months, <b>or</b></li> <li>▪ 30 mg SC every 4 months, <b>or</b></li> <li>▪ 45 mg SC every 6 months</li> </ul> |
| buserelin acetate                   | <ul style="list-style-type: none"> <li>▪ 6.3 mg SC every 2 months, <b>or</b></li> <li>▪ 9.45 mg SC every 3 months</li> </ul>  |

Duration: Depends on the indication for medical orchiectomy.

**SPECIAL PRECAUTIONS:**

In order to cover for the disease flare during the first few days when the testosterone level may be elevated, patients should receive a non-steroidal or steroidal anti-androgen for one month.

**SIDE EFFECTS:**

Hot flushing, impotence, gynecomastia, erythema and irritation of the injection site. Muscle weakness and weight gain. Adverse CNS effects occur in 3% or more patients, including dizziness, pain, headache and paresthesias. Mood changes. Prolonged suppression of testosterone may occur in the elderly (over 75 years) and with the longer lasting preparations. Long-term use accelerates osteoporosis.

**Call [Dr Kollmannsberger](#) or [tumour group delegate](#) at (604) 877-6000 or 1-800-663-3333 with any problems or questions regarding this treatment program.**