

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

Protocol Code

GUPLHRH

Tumour Group

Genitourinary

Contact Physician

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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:

1. Goserelin acetate.	<ul style="list-style-type: none">▪ 3.6 mg SC every 4 weeks or▪ 10.8 mg SC every 12 weeks
2. Leuprolide acetate	<ul style="list-style-type: none">▪ 7.5 mg IM every 4 weeks, or▪ 22.5 mg IM or SC every 3 months, or▪ 30 mg IM every 4 months, or▪ 45 mg SC every 6 months
3. Buserelin acetate	<ul style="list-style-type: none">▪ 6.3 mg SC every 2 months, or▪ 9.45 mg SC every 3 months

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. Tom Pickles or tumour group delegate at (604) 877-6000 or 1-800-663-3333 with any problems or questions regarding this treatment program.

Date activated: N/A

Date revised: 01 May 2009 (physician contact revised, strengths of leuprolide SC injection revised)