

# BC Cancer Protocol Summary for Androgen Deprivation Therapy for Prostate Cancer

**Protocol Code**

**GUPADT**

**Tumour Group**

**Genitourinary**

**Contact Physician**

**Dr. Mira Keyes**

## ELIGIBILITY:

Patients must have:

- Localized prostate cancer with recurrence risks or biochemical relapses
- Locally advanced or metastatic prostate adenocarcinoma

## TESTS:

- Baseline: PSA, testosterone
- If clinically indicated: PSA, testosterone
- For patients taking flutamide, every 3 months: total bilirubin, ALT, alkaline phosphatase

## TREATMENT:

Drug	Dose and BC Cancer Administration Guideline
goserelin long acting (ZOLADEX) (ZOLADEX LA)	<ul style="list-style-type: none"><li>▪ 3.6 mg subcutaneous every month, <b>or</b></li><li>▪ 10.8 mg subcutaneous every 3 months</li></ul>
OR	
leuprolide long acting  (LUPRON DEPOT)  (ELIGARD)	<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><li>▪ 7.5 mg subcutaneous every month, <b>or</b></li><li>▪ 22.5 mg subcutaneous every 3 months, <b>or</b></li><li>▪ 30 mg subcutaneous every 4 months, <b>or</b></li><li>▪ 45 mg subcutaneous every 6 months</li></ul>
OR	
degarelix	<ul style="list-style-type: none"><li>▪ Starting dose: 240 mg subcutaneous* (as two injections of 120 mg) on day 1, followed by</li><li>▪ Maintenance dose: 80 mg subcutaneous (as a single injection) every month, starting one month after starting dose</li></ul>

\*Injections to be given in the abdominal region. To reduce incidence of injection site reactions: inject slowly; leave needle in place for 30 seconds after injection and then withdraw needle slowly.

**Treatment duration:** depends on the indication. May continue in castrate resistant disease.

**If required, add on oral anti-androgen agent:**

Drug	Dose	BC Cancer Administration Guideline
bicalutamide**	50 mg daily	PO
OR		
flutamide	250 mg TID	PO

\*\* Preferred anti-androgen

- Degarelix does not induce a testosterone surge or clinical flare, therefore anti-androgen use with degarelix is not required.
- To block clinical flare to LHRH agonist, oral anti-androgen agent should be started at least 1 to 2 weeks prior to first LHRH agonist dose.

**Oral anti-androgen treatment duration:**

- To block clinical flare to LHRH agonist: 3 to 4 weeks.
- Other indications: May be continued for as long as patient is treated with LHRH agonist.

**PRECAUTIONS:**

1. **Disease flare** can occur during the first few days of LHRH agonist therapy when the testosterone level may be elevated. Patients should receive an antiandrogen for 3 to 4 weeks with the initial dose.
2. **Androgen deprivation** may cause hot flashes, 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.
3. **Increased risks of cardiac events:** Androgen deprivation therapy may increase cardiovascular risk in men with prostate cancer. Physicians should assess cardiovascular risk and manage as per clinical practice guidelines.
4. **Osteoporosis:** Androgen deprivation therapy may cause an increased risk of osteoporosis and fractures. Physicians should assess osteoporosis risk and manage as per clinical practice guidelines.
5. **Diarrhea:** discontinue flutamide if diarrhea develops.

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

## References

1. Loblaw DA, Virgo KS, Nam R, et al. Initial hormonal management of androgen-sensitive metastatic, recurrent, or progressive prostate cancer: 2006 update of an American Society of Clinical Oncology practice guideline. *J Clin Oncol* 2007;25(12):1596-605.
2. Cornford P, van den Bergh RCN, Briers E, et al. EAU-EANM-ESTRO-ESUR-SIOG guidelines on prostate cancer. Part II-2020 update: treatment of relapsing and metastatic prostate cancer. *Eur Urol* 2021;79(2):263-282.
3. Lowrance WT, Breau RH, Chou R, et al. Advanced prostate cancer: AUA/ASTRO/SUO Guideline PART I. *J Urol* 2021;205(1):14-21.
4. Bekelman JE, Rumble RB, Chen RC, et al. Clinically localized prostate cancer: ASCO clinical practice guideline endorsement of an American Urological Association/American Society for Radiation Oncology/Society of Urologic Oncology guideline. *J Clin Oncol* 2018;36(32):3251-3258.
5. Eastham JA, Aufferberg GB, Barocas DA, et al. Clinically localized prostate cancer: AUA/ASTRO guideline. Part III: principles of radiation and future directions. *J Urol* 2022;208(1):26-33.