



**INLAND EMPIRE HEALTH PLAN**

This policy has been developed through review of medical literature, consideration of medical necessity, generally accepted medical practice standards, and approved by the IEHP Pharmacy and Therapeutic Subcommittee.

**Drug:** Lupron (leuprolide), Lupron Depot (leuprolide), Lupron Depot-Ped (leuprolide)

**Class:** GnRH agonist

**Formulary medication:** N/A

**Effective date:** November 16, 2011

**Policy/Criteria:**

- I. May be medically necessary for treatment endometriosis:
  - a. Confirmed diagnosis of endometriosis with associated dysmenorrhea, irregular bleeding, and/or significant pain
  - b. Confirmed failure/intolerance of first line therapies; oral contraceptives, NSAIDS, danazol
  - c. May not be prescribed for the sole purpose of infertility treatment, non-covered Medi-Cal benefit
  - d. Duration of approval: 6 months
- II. May be medically necessary for the treatment of anemia due to uterine leiomyomata (fibroids)
  - a. Confirmed diagnosis of anemia related to uterine leiomyomata
  - b. Must be used in combination with iron therapy
  - c. Duration of approval: 2 months
- III. May be medically necessary for the treatment of central precocious puberty (idiopathic or neurogenic) in children:
  - a. Confirmed diagnosis of CPP with onset of secondary sexual characteristics earlier than 8 years in females and 9 years in males
  - b. Duration of approval: 12 months
- IV. May be medically necessary for advanced prostate cancer (palliative treatment):
  - a. Failure/intolerance to alternative formulary therapy (Premarin, Menest, estradiol)
  - b. Must be prescribed by oncologist
  - c. Duration of approval: 12 months

**Clinical Justification:**

1. The American College of Obstetricians and Gynecologists (ACOG) recommends medical management of endometriosis using oral contraceptives, progestins, danazol, nonsteroid anti-inflammatory drugs and gonadotropin-releasing hormone (GnRH) agonists.
2. All the recommended medications effectively reduce the size and growth of endometrial tissue.

3. In children with central precocious puberty (CPP), clinical studies have shown that reduction of gonadotropins will allow for normal physical and psychological development by slowing bone age progression and preserving adult height (Ht) through suppression of sexual steroid secretion.
4. NCCN Guidelines for prostate cancer indicate that there is an increased risk of diabetes and cardiovascular disease in men receiving GnRH agonists for prostate cancer treatment. GnRH agonists are not recommended as first line and should be utilized in situations of advanced cancer (rising PSA, metastasis). Treatment varies depending on degree severity of cancer.

#### References:

1. American College of Obstetricians and Gynecologists (ACOG). Management of endometriosis. Washington (DC): American College of Obstetricians and Gynecologists (ACOG); 2010 Jul. 14 p. (ACOG practice bulletin; no. 114).
2. Massart et al. Growth outcome during GnRH agonist treatments for slowly progressive central precocious puberty. *Neuroendocrinology*. 2009;90(3):307-14. Epub 2009 Jul 30.
3. Lupron Depot-Ped (leuprolide acetate for depot suspension) package insert. North Chicago, IL: Abbott Laboratories; 2011 Aug.
4. Schlesselman JJ. "Risk of endometrial cancer in relation to use of combined oral contraceptives: A practitioner's guide to meta-analysis." *Hum Reprod* 1997;12:1851-1863.
5. Sherman ME et al. "Risk factors and hormone levels in patients with serous and endometrioid uterine carcinomas." *Mod Pathol* 1997;10:963-8.
6. Vessey MP et al. "Endometrial and ovarian cancer and oral contraceptives--findings in a large cohort study." *Br J Cancer* 1995;71:1940-2.
7. National Comprehensive Cancer Network® (NCCN), "Clinical Practice Guidelines in Oncology™: Prostate Carcinoma," Version 2.2009. Available at [http://www.nccn.org/professionals/physician\\_gls/PDF/prostate.pdf](http://www.nccn.org/professionals/physician_gls/PDF/prostate.pdf)