

Leuprolide

Class: Gonadotropin-Releasing Hormone Agonist

Indications :

- _ Palliative treatment of advanced prostate cancer;
- _ management of endometriosis;
- _ treatment of anemia caused by uterine leiomyomata (fibroids);
- _ central precocious puberty
- _ Breast cancer, premenopausal ovarian ablation (unlabeled use)
- _ Treatment of paraphilia/hypersexuality (unlabeled use)

Available dosage form in the hospital: 3.75 MG depot , 22.5 MG VIAL

Trade name: Eligard , Lupron depot-ped , Lupron depot

Doses:

-Advanced prostate cancer:

-I.M.:

- *Lupron Depot 7.5 mg (monthly): 7.5 mg every month or*
- *Lupron Depot 22.5 mg (3 month): 22.5 mg every 12 weeks or*
- *Lupron Depot 30 mg (4 month): 30 mg every 16 weeks or*
- *Lupron Depot 45 mg (6 month): 45 mg every 24 weeks*

-SubQ:

- *Eligard: 7.5 mg monthly or 22.5 mg every 3 months or 30 mg every 4 months or 45 mg every 6 months*
- *Leuprolide acetate 5 mg/mL solution: 1 mg daily*

-Endometriosis: I.M.: Initial therapy may be with leuprolide alone or in combination with norethindrone; if retreatment for an additional 6 months is necessary, concomitant norethindrone should be used. Retreatment is not recommended for longer than one additional 6-month course.

- *Lupron Depot: 3.75 mg every month for up to 6 months or*
- *Lupron Depot-3 month: 11.25 mg every 3 months for up to 2 doses (6 months total duration of treatment)*

-Uterine leiomyomata (fibroids): I.M. (in combination with iron):

- *Lupron Depot: 3.75 mg every month for up to 3 months or*
- *Lupron Depot-3 month: 11.25 mg as a single injection*

-Breast cancer, premenopausal ovarian ablation (unlabeled use):

- Lupron Depot: 3.75 mg every 28 days for up to 24 months **or**
- Lupron Depot-3 month: 11.25 mg every 3 months for up to 24 months

-Treatment of paraphilia/hypersexuality (unlabeled use) Males: I.M.:

Note: May cause an initial increase in androgen concentrations which may be treated with an antiandrogen (eg, flutamide, cyproterone) for 1-2 months . Avoid use in patients with osteoporosis or active pituitary pathology.

- SubQ: Test dose: 1 mg (observe for hypersensitivity)
- Depot I.M.: 3.75-7.5 mg monthly

Geriatric

Refer to adult dosing.

Renal Impairment:

No dosage adjustment provided in manufacturer's labeling (has not been studied).

Hepatic Impairment:

No dosage adjustment provided in manufacturer's labeling (has not been studied).

Common side effect :

Cardiovascular: Edema ($\leq 14\%$)

Central nervous system: Headache ($\leq 65\%$), pain ($< 2\%$ to 33%), depression ($\leq 31\%$), insomnia ($\leq 31\%$), fatigue ($\leq 17\%$), dizziness/vertigo ($\leq 16\%$)

Dermatologic: Skin reaction ($\leq 12\%$)

Endocrine & metabolic: Hot flashes (25% to 98%), testicular atrophy ($\leq 20\%$), hyperlipidemia ($\leq 12\%$), libido decreased ($\leq 11\%$)

Gastrointestinal: Nausea/vomiting ($\leq 25\%$), bowel function altered ($\leq 14\%$), weight gain/loss

Genitourinary: Vaginitis (11% to 28%), urinary disorder (13% to 15%)

Local: Injection site burning/stinging (transient: $\leq 35\%$)

Neuromuscular & skeletal: Weakness ($\leq 18\%$), joint disorder ($\leq 12\%$)

1-10%

Cardiovascular: Angina ($< 5\%$), arrhythmia ($< 5\%$), atrial fibrillation ($< 5\%$), bradycardia ($< 5\%$), CHF ($< 5\%$), deep thrombophlebitis ($< 5\%$), hyper-/hypotension ($< 5\%$), palpitation ($< 5\%$), syncope ($< 5\%$), tachycardia ($< 5\%$)

Central nervous system: Nervousness ($\leq 8\%$), anxiety ($\leq 6\%$), confusion ($< 5\%$), delusions ($< 5\%$), dementia ($< 5\%$), fever ($< 5\%$), seizure ($< 5\%$)

Dermatologic: Acne ($\leq 10\%$), alopecia ($\leq 5\%$), bruising ($\leq 5\%$), cellulitis ($< 5\%$), pruritus ($\leq 3\%$), rash ($\leq 2\%$), hirsutism ($< 2\%$)

Endocrine & metabolic: Dehydration ($\leq 8\%$), gynecomastia ($\leq 7\%$), breast tenderness/pain ($\leq 6\%$), bicarbonate decreased ($\geq 5\%$), hyper-/hypcholesterolemia

($\geq 5\%$), hyperglycemia ($\geq 5\%$), hyperphosphatemia ($\geq 5\%$), hyperuricemia ($\geq 5\%$), hypoalbuminemia ($\geq 5\%$), hypoproteinemia ($\geq 5\%$), lactation ($< 5\%$), testicular pain ($\leq 4\%$), menstrual disorder ($\leq 2\%$)

Gastrointestinal: Dysphagia ($< 5\%$), gastrointestinal hemorrhage ($< 5\%$), intestinal obstruction ($< 5\%$), ulcer ($< 5\%$), constipation ($\leq 3\%$), gastroenteritis/colitis ($\leq 3\%$), diarrhea ($\leq 2\%$)

Genitourinary: Prostatic acid phosphatase increased/decreased ($\geq 5\%$), urine specific gravity increased/decreased ($\geq 5\%$), impotence ($\leq 5\%$), balanitis ($< 5\%$), incontinence ($< 5\%$), penile/testis disorder ($< 5\%$), urinary tract infection ($< 5\%$), nocturia ($\leq 4\%$), polyuria (2% to 4%), dysuria ($\leq 2\%$), bladder spasm ($< 2\%$), erectile dysfunction ($< 2\%$), hematuria ($< 2\%$), urinary retention ($< 2\%$), urinary urgency ($< 2\%$)

Hematologic: Eosinophilia ($\geq 5\%$), leukopenia ($\geq 5\%$), platelets increased ($\geq 5\%$), anemia

Hepatic: Liver function tests abnormal ($\geq 5\%$), partial thromboplastin time increased ($\geq 5\%$), prothrombin time increased ($\geq 5\%$), hepatomegaly ($< 5\%$)

Local: Injection site pain (2% to 5%), injection site erythema (1% to 3%)

Neuromuscular & skeletal: Myalgia ($\leq 8\%$), paresthesia ($\leq 8\%$), neuropathy ($< 5\%$), paralysis ($< 5\%$), pathologic fracture ($< 5\%$), bone pain ($< 2\%$), arthralgia ($\leq 1\%$)

Renal: BUN increased ($\geq 5\%$), creatinine increased ($\geq 5\%$)

Respiratory: Emphysema ($< 5\%$), epistaxis ($< 5\%$), hemoptysis ($< 5\%$), pleural effusion ($< 5\%$), pulmonary edema ($< 5\%$), dyspnea ($\leq 2\%$), cough ($\leq 1\%$)

Miscellaneous: Diaphoresis ($\leq 5\%$), allergic reaction ($< 5\%$), infection (5%), lymphadenopathy ($< 5\%$)

Pregnancy category : X