

LHRH Agonist Use in Gynecologic Disorders

Generic Name	Trade Name®	Manufacturer
Goserelin	Zoladex	Astra-Zeneca
Leuprolide	Lupron	TAP

The main indication for LHRH agonists is to treat prostate cancer; for further information on their use in cancer refer to the VA Class Review of LHRH agonists at www.vapbm.org LHRH agonists are also indicated in gynecologic disorders.

Both agents have an FDA-approved indication for endometriosis, however treatment is indicated for only 6 months with either agent.

LHRH agonist use for fibroids is limited to 3 months prior to surgical removal (due to bone mineral density loss). Goserelin does not have an FDA labeled indication, however there are published studies supporting its use.

In summary, medical therapy with LHRH agonists is an option for gynecologic disorders, although may be combined with or followed by surgical therapy to achieve complete results and minimize bone mineral density loss. Use of these agents is limited to 3-6 months, and repeat courses are not currently indicated, however may be used after bone mineral density approaches normal levels.

INDICATIONS

	Endometriosis	Uterine leiomyomata (Fibroids)		Dysfunctional uterine bleeding	Breast CA
	Pain relief and reduction of size and number of lesions	Reduction¹	Anemia	Endometrial thinning prior to ablation	
Goserelin 3.6 mg 1 month depot	X ²	Studied	Studied	X ³	X ⁴
Goserelin 10.8 mg 3 month depot					
Leuprolide 3.75 mg 1 month depot	X ²		X ⁵	Studied	
Leuprolide 11.25 mg 3 month depot	X ²		X ⁵		

¹ Treated for up to 6 months to shrink fibroids and offer a vaginal versus abdominal procedure

² Limited to 6 month duration due to bone mineral density loss during continuous administration; adding hormone replacement therapy is effective in reducing loss of bone mineral density

³ Administered as 1-2 doses (of the 30 day depot) given 4 weeks apart

⁴ Palliative treatment

⁵ Duration of therapy is up to 3 months after response to iron alone is inadequate; continue iron concomitantly