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# Leuprolide Acetate

National Cancer Institute

## Source

National Cancer Institute. *Leuprolide Acetate*. NCI Thesaurus. Code C1319.

The acetate salt of a synthetic nonapeptide analogue of gonadotropin-releasing hormone. Leuprolide binds to and activates gonadotropin-releasing hormone (GnRH) receptors. Continuous, prolonged administration of leuprolide in males results in pituitary GnRH receptor desensitization and inhibition of pituitary secretion of follicle stimulating hormone (FSH) and luteinizing hormone (LH), leading to a significant decline in testosterone production; in females, prolonged administration results in a decrease in estradiol production. This agent reduces testosterone production to castration levels and may inhibit androgen receptor-positive tumor progression.