

## Hormone Injections

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**1. Can multiple doses of one strength of depot anti-hormonal injection be used to make up a total dose? For example: 2 x 22.5 mg leuprolide to equal 1 x 45 mg leuprolide injection (ordered as LUPRON® INTRAMUSCULAR)?**

Long-acting depot anti-hormonal injections containing leuprolide and goserelin, commonly used in breast and prostate cancer, are formulated to release the drug over a specific time period.

For example, LUPRON® DEPOT 7.5 mg (1-month SR), 22.5 mg (3-month SR) 30 mg (4-month SR) and 45 mg (6-month SR) injections are administered intramuscularly and designed to provide continuous sustained release of leuprolide for one, three, four and six months respectively. Due to different release characteristics of each preparation, a double dose of the 22.5 mg (3-month) formulation is not equivalent to a dose of 45 mg (6-month) formulation and should therefore not be given.

NOTE: LUPRON® 45 mg intramuscular injection is not available in Canada (alternative is ELIGARD® 45 mg subcutaneous injection)

**2. What should the nurse or physician administering a depot anti-hormonal injection of goserelin (ZOLADEX®) do if a pellet falls out of the syringe?**

Goserelin (ZOLADEX®, ZOLADEX® LA) and leuprolide (ELIGARD®, LUPRON®) injections are long-acting anti-hormonal depot injections formulated to release the drug over a specific time period.

Both ZOLADEX® 3.6 mg and ZOLADEX® LA 10.8 mg subcutaneous injections contain goserelin acetate equivalent to goserelin 3.6 mg over 1 month, and 10.8 mg over 3 months respectively. Each depot implant is supplied as a cylindrical rod of biodegradable and biocompatible D-L Lactide-glycolide copolymer about the size of a grain of rice. It is

presented in a sterile ready-to-use syringe with a needle for a single subcutaneous injection. If the drug pellet falls out of the syringe, the dose will have to be discarded into a hazardous drug disposal bin. A new syringe should be dispensed and administered to the patient.

**Reference:**

eCPS [Internet]. Ottawa Ontario: Canadian Pharmacists Association [2023]. Available from <https://www.myrxtx.ca>. Accessed March 28, 2023