

**SUPRELORIN®: SIX AND TWELVE MONTH  
SUPPRESSION OF FERTILITY IN MALE DOGS**

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Suprelorin® is indicated for the suppression of fertility in male dogs. It is an implant that contains 4.7 mg or 9.4 mg for suppression that lasts 6 and 12 months, respectively. This implant was developed originally by Peptech Animal Health, with significant scientific guidance by Dr. Tim Trigg and Dr. Wolfgang Jochle. Peptech achieved approval for the implants in Australia, New Zealand the European Union. (Suprelorin is not approved in the USA.) Peptech Anima Health has been acquired by Virbac, and Virbac is now selling Suprelorin in the EU, Australia and New Zealand.

Deslorelin belongs to the family of compounds known as gonadotropin releasing hormone agonists (GnRH agonists). When administered at low levels continuously, they cause the GnRH receptors in the pituitary gland to down regulate – that is become insensitive to the GnRH hormone that is normally released from the brain in a pulsatile fashion. When the pituitary is insensitive to GnRH, it no longer secretes luteinizing hormone and follicle stimulating hormone, and this in term, shuts off the production of sex steroids – specifically in the male – testosterone.

When Suprelorin is implanted subcutaneously in male dogs, it suppresses testosterone, and therefore fertility. This is called ‘medical castration’ – no sperm is produced and the dogs show decreased libido. After implantation, suppression of fertility can take up to 3-4 weeks, and re-implantation at either 6 or 12 months is safe and continues the suppression of fertility as long as the implants are releasing deslorelin. Suprelorin is not labeled as “reversible” because the reversibility is unpredictable.

Although not labeled for use in female dogs, off label use in females has been reported, and is used in some field situations where spaying is impractical. Depending on the stage of the estrus cycle when Suprelorin is implanted in females, it may cause an initial induced estrus, followed by a suppression of fertility and estrus. There are some reports that the compound may have unwanted effects on the endometrium, but because no well controlled safety studies have been done in female dogs, the significance of these reports is unknown.

There is some evidence that GnRH implants in cats may have the effect of causing prolonged (>3 year) suppression of fertility, but Suprelorin is not approved for use in cats.