

# Suprelorin – both sides of the story

Dr Karen Hedberg BVSc

## What is it?

Suprelorin (deslorelin) is a hormonal implant of a GnRH agonist that effects contraception by temporarily suppressing the reproductive enzyme system. It suppresses the pituitary (FSH and LH) and gonadal hormones - Oestradiol and Progesterone in the female and Testosterone in the male. The drug comes in a pellet that is given subcutaneously, there is a 6 month and a 12 month form.

### What does it do?

The effect of Suprelorin is to suppress the reproductive system. Oddly, it does this by initially stimulating the reproductive system such, that in females, it can induce oestrus and ovulation and in males there is a temporary stimulation of testosterone and semen production. This short period of stimulation (usually less than 2 weeks) is followed by a prolonged down regulation. For this it means, in females, a failure to cycle (after the initial oestrus period) and in the male, a drop in testosterone levels and a cessation of semen production.

#### Why is it used?

In the female it can be used 2 ways:

(i) to induce ovulation and bring females into season, which can be very useful in bitches that are failing to cycle for any defined reason, or to induce a season to use a male that may only be only temporarily available. This should not be used in a bitch that has cycled within 4 months. The pellet is placed subcutaneously in a thin skinned area and then removed after the bitch has ovulated (usually within 10-14 days).

(ii) to suppress short cycling bitches (and cats) – some bitches cycle too frequently – usually within 4 months, and fail to successfully breed because of this. The pellet is left in and gradually gets absorbed. This generally gives around 12 months without a season. The bitch should be bred at the next season.

In the male it can be used for various reasons :

- To decrease dog aggression by lowering testosterone levels.
- To temporarily sterilise the dog. This may have been necessary due to reoccurring bouts of prostate problems.
- It acts as a temporary castration of the dog. The side effects are decreased testicle size and firmness, an effect that varies between dogs. The effect lasts 6 months on average (for the 6 month implant).



#### Problems

While most bitches will return to normal cycling after the pellet dissolves, there may be a few that fail to cycle. As these were bitches that were problem breeding bitches in the first place, that is a risk that the owners should have been aware of prior to use.

Males - again, return to normal sperm production and libido is usually between 6 to 9 months. However in a few, there may be ongoing suppression of testosterone and sperm production. In these dogs the testicles may remain smaller and softer. Owners should be told of the possible risks, which, while the odds are low, they still exist.

## Judging Suprelorin treated dogs.

Suprelorin decreases the size and firmness of the testicles. When judging dogs, a judge is looking for two normalsized, fully descended testicles in the scrotum. One is really judging for reproductive viability. When a judge suddenly feels small, soft testicles in a line up of dogs of the same breed and age, the judge may leave the dog in his position of anatomical worth.

If the effect is small, these dogs are rarely penalised. However, the use or otherwise of Suprelorin implants cannot be accepted as an excuse in a show ring. As with every appointment, each judge must make up their own mind relative to the individual dog's worth on the day.