

Contraception protocol for giant otters (*Pteronura brasiliensis*)

Females:

Deslorelin acetate (Suprelorin) Subcutaneous implant- 1-2x 4.7mg implants depending on size and weight for a minimum duration of 6 months and 1-2x 9.4mg for a minimum duration of 12 months. Due to long reversal times in otter species following deslorelin use, a single implant should initially be used, increasing to two implants if no suppression is observed. Duration of efficacy can show individual variation. To suppress the initial stimulation phase supplement the first bout with additional contraception such as oral megestrol acetate pills (Ovarid/Megace) daily, 7 days before and 8 days after implantation. In seasonal breeders, treatment should be given more than 2 months prior to the expected breeding season. Deslorelin is designed to be fully reversible; however there are no records of reversal in our database. Removal of implant to aid reversibility is recommended and therefore implants should be placed in location with thinner skin e.g. the umbilical region, armpit. General side effects include increased appetite and weight gain.

Leuprolide acetate (Lupron®): Subcutaneous or intramuscular injection – Although it is believed that Lupron should work in giant otters, there are no cases of Lupron being used in this species in the database therefore efficacy, dose and reversibility have not been established. Therefore EGZAC is in no position to recommend or discourage its use.

Available in various formulations lasting from 1 to 6 months, duration of efficacy can show individual variation. In seasonal breeders, treatment should be given more than 2 months prior to the expected breeding season. To suppress the initial stimulation phase supplement the first bout with additional contraception such as oral megestrol acetate pills (Megace) daily, 7 days before and 8 days after the first injection. A side effect of using Lupron is suppression of secondary sexual characteristics.

Progestagens are not recommended for this species as risk of pseudopregnancy, endometrial hyperplasia and pyometra increases with exposure to prolonged circulating progestagens/ progesterone.

Males:

Deslorelin (Suprelorin): Subcutaneous implant- 1-2x 4.7mg implants depending on size and weight for a **minimum** duration of 6 months and 1-2x 9.4mg implants for a **minimum** duration of 12 months. Due to long reversal times in otter species following deslorelin use, a single implant should initially be used, increasing to two implants if no suppression is observed. Duration of efficacy can show individual variation. There is an initial stimulation phase after treatment which unfortunately cannot be suppressed in males. In seasonal breeders, treatment should be given more than 2 months prior to the expected breeding season. Deslorelin is designed to be fully reversible; however there are

no records of reversal in our database. Removal of implant to aid reversibility is recommended and therefore implants should be placed in location with thinner skin e.g. the umbilical region, armpit. General side effects include feminisation of males. Males may lose muscle and overall weight, becoming the size (weight) of females.

Leuprolide acetate (Lupron®): Subcutaneous or intramuscular injection – Although it is believed that Lupron should work in giant otters, there are no cases of Lupron being used in this species in the database therefore efficacy, dose and reversibility have not been established. Therefore EGZAC is in no position to recommend or discourage its use.

Available in various formulations lasting from 1 to 6 months, duration of efficacy can show individual variation. In seasonal breeders, treatment should be given more than 2 months prior to the expected breeding season. Males can remain fertile for two or more months following first being injected and the initial stimulation phase may come with an increase in aggression or sexual interest, it is therefore recommended that the sexes are separated for this period. A side effect of using Lupron is suppression of secondary sexual characteristics.