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Regu-Mate® Oral Solution

Active Ingredient

Altrenogest

Product Type

Progestin

Manufacturer

Merck

Product information

Regu-Mate, marketed for short-term estrus suppression in domestic horses, has been used for aggression control in male Pzewalski's horses and for contraception in some perissodactyls, artiodactyls and marine mammals. Tapirs have been treated with Regu-Mate, however the standard horse dose may not be effective in all individuals.

Safety to humans

Protective gloves should be worn during administration, since the product is readily absorbed through skin, which at high levels might cause disruption of menstrual cycles or prolongation of pregnancy.

Dosing

The dosage for most species is 0.044mg/kg body weight daily, which adheres to the manufacturer's instructions.

Latency to effectiveness

Although individuals vary, threshold levels of the hormone should be reached in the blood within 1 to 3 days of starting this product. However, pre-ovulatory follicles are difficult to suppress, so, if cycle stage is not known, extra time must be allowed. Therefore, separation or alternative contraception should be used for 1-2 weeks after treatment begins.

Signs of estrus during treatment

Synthetic progestins may achieve contraception by blocking ovulation, causing thickening of cervical mucus, slowing ovum transport, and/or interfering with fertilization or implantation. However, follicle growth may continue and sometimes be accompanied by estrogen production sufficient to cause estrous behavior. Ovulation may occur even though pregnancy does not ensue. Higher progestin doses may be preferred so that estrous behavior is prevented, but may not be effective in completely suppressing follicle growth and all estrogen production.

Duration of efficacy and reversibility

Duration of efficacy may not be much more than 1 day, so the product must be administered daily. Following cessation of treatment, rapid clearance can result in ovulation within a few days, but actual latency to conception will vary by individual.

Use during pregnancy

Progestins are not recommended in late pregnancy because of the possibility of prolonged gestation, although the effect may depend on species and dose.

Use during lactation

Progestins are sometimes prescribed for lactating women and are considered generally safe for nursing infants.

Use in pre-pubertal animals

Lack of data on pre-pubertal treatment and potential long-term effects on fertility contraindicates recommending contraception before puberty. Future reproduction was not affected in calves of domestic cows on MGA-treated feed, but no published studies of pre-pubertal treatment with MGA or other progestins have been conducted with other species, so possible long-term effects on fertility are not known.

Precautions

Progestins may cause weight gain in all species. Possible deleterious effects on uterine and mammary tissues vary greatly by species; see cautions for each taxon.

Consideration for seasonal breeders

Treatment should begin at least 1 month before the anticipated onset of the breeding season.

Reporting Requirements

All institutions using this product are asked to contribute contraception information for their animals to the AZA Reproductive Management Center's Contraception Database (<https://www.zoocontraceptiondata.org>). It is essential that accurate records of doses and treatment intervals be maintained, and results reported, to contribute to dosage development.

For questions about the RMC Contraception Database, contact:

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