

## Anti- gestagens

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<b>Commercial Name:</b>	Alizin®; RU 486
<b>Contraceptive Product:</b>	Aglepristone (Alizin); Mifepristone (RU 486)
<b>Product Category:</b>	Anti-gestagens/synthetic progesterone antagonists.
<b>Product Availability:</b>	Alizin is widely available through veterinary drug distributors. Mifepristone is for human use only. In exceptional cases it might be provided and applied via the IZW Berlin.
<b>Restrictions and/or permit required by Importing Country:</b>	Alizin is widely available through veterinary drug distributors in Europe.
<b>Mechanism of action:</b>	Anti- gestagens bind to the uterine progesterone receptor and inhibit the action of progesterone on endometrium. During early pregnancy implantation of embryo is prevented; at advance stages of pregnancy they can cause abortion.
<b>Product information</b>	Products used to prevent implantation/ nidation in female bear species. For application in other species, please contact EGZAC at <a href="mailto:contraception@chesterzoo.org">contraception@chesterzoo.org</a> .
<b>Delivery Route and dose:</b>	Alizin: two vaccinations of 0.33 ml/kg or 10-15 mg/kg body weight injected subcutaneously under anaesthesia or trained behaviour 24hrs APART. No more than 5 ml per injection site recommended. <b>Gloves must be worn when administering anti-gestagens.</b> Note that in African wild dog and lionesses, a SINGLE dose of Alizin was sufficient to produce abortion/ prevent implantation <sup>7</sup>
<b>Females</b>	
<b>Latency to effectiveness:</b>	Abortion will take place 3-7 days after treatment, depending on the species. Please see reference 7 for more information.
<b>Oestrous cycles during contraceptive treatment:</b>	In dogs an early return to oestrus is frequently observed and the time between oestrus shortened by 1-3 months. Felids will rapidly return to oestrus too and plans to contracept should be made about 1-3 weeks after the use of Alizin. <sup>7</sup>
<b>Managing of initial stimulation phase:</b>	N/A
<b>Use during pregnancy:</b>	Anti-gestagens are abortive when used during pregnancy.
<b>Use during lactation:</b>	N/A

<b>Use in prepubertals or juveniles:</b>	N/A
<b>Use in seasonal breeders:</b>	Application in Brown bears must be shortly before implantation of the embryo: end of October until the beginning of November in the Northern hemisphere. In other bear species application time must be determined.
<b>Duration</b>	7 days, prevention of embryo nidation
<b>Reversibility</b>	Alizin: in dogs an early return to oestrus is frequently observed and the time between oestrus shortened by 1-3 months. After treatment bears return to normal cycle and fertility in the next season.
<b>Effects on Behaviour</b>	Data deficient
<b>Effects on sexual physical characteristics</b>	Data deficient
<b>Males</b>	
<b>Latency to effectiveness:</b>	N/A
<b>Use in prepubertals or juveniles:</b>	N/A
<b>Use in seasonal breeders:</b>	N/A
<b>Duration:</b>	N/A
<b>Reversibility</b>	N/A
<b>Effects on Behaviour</b>	N/A
<b>Effects on sexual physical characteristics</b>	N/A
<b>General:</b>	
<b>Side effects</b>	Alizin: Field trials in dogs have shown cases of anorexia (25 %), excitation (23 %), depression (21 %), vomiting (2 %) and diarrhoea (13 %). Local inflammatory reaction may occur at the site of injection of Alizin. No side effects in bears were documented. <b>EGZAC recommends always reading the manufacturer's data sheet</b>
<b>Warnings</b>	Accidental injection may be a particular hazard to women who are pregnant, intending to become pregnant or whose pregnancy status is unknown. Women of child-bearing age should avoid contact with the veterinary medicinal product or wear disposable plastic gloves when administering the veterinary medicinal product.
<b>Reporting Requirements: In order to increase our knowledge of the efficacy of contraception methods it is recommended that all individuals on contraception be reported to EGZAC</b>	

#### References:

- 1) Göritz, F., Quest, M., Hildebrandt, T.B., Meyer, H.H.D., Kolter L., Jewgenow, K. (2001): Antiprogestins - a new approach to control reproduction in captive bears. *Reprod. Fertil. Suppl.* 57, 249-254.
- 2) Jewgenow K, Quest M, Elger W, Hildebrandt TB, Meyer HHD, Strauss G, Göritz F (2001): Administration of antiprogestin J956 for contraception in bear – a pharmacological study. *Theriogenology*, 56(4):601-11.
- 3) García Mitacek MC, Stornelli MC, Praderio R, Stornelli MA, de la Sota RL. Efficacy of cloprostenol or aglepristone at 21-22 and 35-38 days of gestation for pregnancy termination in queens. *Reprod Domest Anim.* 2012 Dec;47 Suppl 6:200-3. doi: 10.1111/rda.12023.
- 4) Goericke-Pesch S, Georgiev P, Wehrend A. Prevention of pregnancy in cats using aglepristone on days 5 and 6 after mating. *Theriogenology.* 2010 Jul 15;74(2):304-10. doi: 10.1016/j.theriogenology.2010.02.014. Epub 2010 May 8.
- 5) Fontbonne A, Fontaine E, Lévy X, Bachelier R, Bernex F, Atam-Kassigadou S, Guffroy M, Leblond E, Briant E. Induction of parturition with aglepristone in various sized bitches of different breeds. *Reprod Domest Anim.* 2009 Jul;44 Suppl 2:170-3. doi: 10.1111/j.1439-0531.2009.01377.x.
- 6) [http://www.noahcompendium.co.uk/Virbac\\_Limited/Alizin\\_30mg\\_mL\\_solution\\_for\\_injection/-57089.html](http://www.noahcompendium.co.uk/Virbac_Limited/Alizin_30mg_mL_solution_for_injection/-57089.html)
- 7) Bertschinger, HJ, Caldwell, P. (2016) Fertility suppression of some wildlife species in Southern Africa – a review. *Reproduction in Domestic Animals*, Suppl. 1; pp. 18-24.

**Disclaimer:** EGZAC endeavours to provide correct and current information on contraception from various sources. As these are prescription only medicines it is the responsibility of the veterinarian to determine the dosage and best treatment for an individual animal under their care. EGZAC can therefore not be held liable for any injury, damage or contraception failure in an animal.