1. NAME OF THE VETERINARY MEDICINAL PRODUCT

ALPHADERM Plus cutaneous spray solution for dogs

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml of product contains:
Active substances:
Marbofloxacin.......................... 1.025 mg
Ketoconazole.......................... 2.041 mg
Prednisolone ......................... 0.926 mg
Excipients:
For a full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM
Yellowish, slightly opal cutaneous spray solution in 100 ml PET bottle with spraying pump.

4. CLINICAL PARTICULARS

4.1 Target species
Dogs

4.2 Indications for use, specifying the target species
Treatment of acute dermatitis in dogs, when mixed infection caused by Pseudomonas aeruginosa or Staphylococcus pseudointermedius susceptible to marbofloxacin and Malassezia pachydermatis susceptible to ketoconazole is demonstrated.

4.3 Contraindications
Do not use in case of hypersensitivity to the active substances or to any of the excipients.

4.4 Special warnings for each target species
Collar should be fixed on the treated dogs in order to prevent licking. Keep the animal to be treated separated from each other in order to prevent licking each other.
Bacterial and fungal dermatitis is often secondary in nature and appropriate diagnosis should be used to determine the primary factors involved.
Unnecessary use of the product in terms of any active substance should be avoided.
Treatment is indicated only if mixed infection with Pseudomonas aeruginosa or Staphylococcus pseudointermedius and Malassezia pachydermatis has been proved. If one of the active substances is no longer indicated due to the different characteristics of bacterial and fungal infections, the application of the product should be discontinued and replaced by an appropriate treatment option.

4.5 Special precautions for use
Special precautions for use in animals
If hypersensitivity to any of the components occurs, treatment should be discontinued and appropriate therapy instituted.
Use of the veterinary medicinal product should be based on identification of infecting organisms and susceptibility testing and take into account official and local antimicrobial policies.
Heavy reliance on a single class of antibiotic may result in the induction of resistance in a bacterial population. It is prudent to reserve fluoroquinolones for the treatment of clinical conditions, which have responded poorly or are expected to respond poorly to other classes of antibiotics.
Prolonged and intensive use of topical corticosteroids preparation is known to trigger local and systemic effects, including suppression of adrenal function, thinning of the epidermis and delayed healing.

Special precautions to be taken by the person administering the veterinary medicinal product to animals
Wear personal protective equipment, impermeable gloves when administering the product.
In case of skin exposition clean the contaminated skin with a water-soap solution.
In case eye contact, wash immediately with abundant water.
Seek medical advice if signs of cutaneous erithema, exanthema, or persistent ocular irritation appear after exposure. Swelling of face, lips and eyes, or respiratory difficulties are more serious signs that need urgent medical action.
Solution is inflammable, smoking and using naked flame is prohibited during administration.

4.6 Adverse reactions (frequency and seriousness)
Mild erythematous lesions have been observed following the application. The frequency of adverse reactions is very rare (less than 1 animal in 10,000 animals, including isolated reports)

4.7 Use during pregnancy, lactation or lay
The safety of the veterinary medicinal product has not been established during pregnancy and lactation. The use is not recommended during pregnancy and lactation.

4.8 Interaction with other medicinal products and other forms of interaction
No data are available.

4.9 Amounts to be administered and administration route
Only for external use. Shake well before use.
The recommended dose level of the product for dogs is 2 squeezes of the application pump (two pumps are equivalent to app. 0.2 ml) two times per day, for 14 days. Spray from a distance of about 10 cm for 5 cm x 5 cm and from a distance of about 30 cm for about 10 cm x10 cm area of skin to be treated. Before the application of product the hair or dirt on the treated surface has to be removed.

4.10 Overdose (symptoms, emergency procedure, antidotes), if necessary
At 5 times the recommended dose, no local or general adverse reactions were observed.

4.11 Withdrawal periods
Not applicable.
5. PHARMACOLOGICAL PROPERTIES
Pharmacotherapeutic group:
Dermatologicals. corticosteroids, weak, combinations with antibiotics
ATCvet code: QD07CA03

5.1 Pharmacodynamic properties
Marbofloxacin is a synthetic broad-spectrum bactericidal agent. It is classified as 2.2 generation fluoroquinolone. It has activity against wide range of Gram-positive and Gram-negative organism, as well as against mycoplasmas. The bactericidal action of marbofloxacin results from interference with the enzymes DNA topoisomerase II (DNA-gyrase) in Gram-negatives ad DNA topoisomerase IV in Gram-positives which are needed for the synthesis and maintenance of bacterial DNA. Such impairment disrupts replication of the bacterial cell, leading to rapid cell death. The rapidity and extent of killing are directly proportional to the drug concentration. It consists of significant post antibiotic effect (PAE).

Ketoconazole is a broad spectrum imidazole antifungal agent. It inhibits the ergosterol biosynthesis of the sensitive fungal strains. Lower concentrations of ketoconazole are fungistatic, however higher concentrations are fungicidal.

Prednisolone is a synthetic corticosteroid. It inhibits the synthesis of eicosanoid molecules during the inflammatory processes due to the inhibition of phospholipase A2 enzyme. It demonstrates pronounced local and systemic anti-inflammatory properties.

5.2 Pharmacokinetic particulars
Systemic absorption of the active ingredients was determined in the course of target animal safety studies with the product. Following application of therapeutic levels of the product (i.e. app. 0.2 ml of test product, app. 0.44 mg ketoconazole twice daily, for 14 days) the active ingredients appeared in plasma samples only at very low concentration. The concentrations remained very low during the whole study. The highest levels of marbofloxacin, ketoconazole and prednisolone in plasma were 4.8 ng/l, 2.8 ng/l, and 4.4 ng/l, respectively. The above levels declined rapidly after the cessation of application.

With regard to available data, following the therapeutic application the active ingredients of the product will not absorb from skin and accumulate causing drug-related harmful action in treated dogs.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients
Dimethyl sulfoxide (DMSO)
Polysorbate 80
Propylene-glycol
Ethanol (96%)
Water for injection

6.2 Incompatibilities
None known.

6.3 Shelf life
Shelf life of the veterinary medicinal product as packaged for sale: 2 years.
Shelf life after first opening the immediate packaging: 28 days.
6.4 Special precautions for storage
Store below 25 °C.

6.5 Nature and composition of immediate packaging
100 ml PET bottle with a spray pump in cardboard box.

6.6 Special precautions for the disposal of unused veterinary medicinal product or waste materials derived from the use of such products
Any unused veterinary medicinal product or waste materials derived from such veterinary medicinal product should be disposed of in accordance with local requirements.

7. MARKETING AUTHORIZATION HOLDER
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8. MARKETING AUTHORIZATION NUMBER(S)

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

10. DATE OF REVISION OF THE TEXT

PROHIBITION OF SALE, SUPPLY AND/OR USE
Not applicable.