Issued: June 2024
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SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Otomicol ear drops and cutaneous suspension for dogs and cats

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml of suspension contains:

Active substances:

Miconazole nitrate	23.00 mg (equivalent to 19.98 mg miconazole)
Prednisolone acetate	5.00 mg
Polymyxin B sulfate	5500 IU (equivalent to 0.5293 mg polymyxin B sulfate)

Excipients:
For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Ear drops/cutaneous suspension.
White suspension.

4. CLINICAL PARTICULARS

4.1 Target species

Dogs and cats.

4.2 Indications for use, specifying the target species

For the treatment of primary and secondary infections of skin (eczema, dermatitis, pyoderma) and skin adnexa (hair, claws, sweat glands), as well as for the treatment of otitis externa, caused by infections with the following miconazole and polymyxin B sensitive pathogens:

Gram-positive bacteria
Staphylococcus spp.
Streptococcus spp.

Gram-negative bacteria
Pseudomonas spp.
Escherichia coli

Yeasts and fungi
Malassezia pachydermatis
Candida spp.

Microsporum spp.
Trichophyton spp.

For the topical treatment of otitis externa caused by the ear mite *Otodectes cynotis*.

4.3 Contraindications

Do not use in animals with perforated ear drums since Polymyxin B is known to be a potential ototoxic agent.
Do not use in cases of hypersensitivity to the active substances or to any of the excipients.

4.4 Special warnings for each target species

As the product is a prescription only medicine, treatment should be closely supervised by a veterinary practitioner.

4.5 Special precautions for use

Special precautions for use in animals

For external use only.
Due to the likely variability (temporal, geographical) in the emergence of bacterial resistance to polymyxin B, bacteriological sampling and sensitivity testing (antibiogram) is recommended. If there is overgrowth of resistance bacteria and/or fungi, treatment with this product should be discontinued and treatment with an appropriate alternative should be initiated.

Special precautions to be taken by the person administering the veterinary medicinal product to animals

People with known hypersensitivity to prednisolone, polymyxin B or miconazole should avoid contact with the veterinary medicinal product.
The veterinary medicinal product may cause irritation to skin and eyes. Avoid contact with skin or eyes. Personal protective equipment consisting of single use disposable gloves should be worn when applying the veterinary medicinal product to animals. In case of accidental spillage, skin or eyes should be rinsed immediately with plenty of water.
Take care to avoid accidental ingestion, especially by a child. In case of accidental ingestion, seek medical advice immediately and show the leaflet or the label to the physician.
Wash hands after use.

Special precautions for the protection of the environment:

Not applicable.

Other precautions:
Not applicable.

4.6 Adverse reactions (frequency and seriousness)

Dog, cat:

Very rare (<1 animal / 10,000 animals treated, including isolated reports):	Deafness[1]
Undetermined frequency (cannot be estimated from the available data):	Local immune deficiency[2,3] Skin thinning[2] Delayed healing[2] Teleangiectasia[2] Increased vulnerability of the skin (with bleeding)[2]

[1]In animals treated for otitis externa, especially in older dogs. Treatment should be discontinued.
[2]With prolonged use due to the contained glucocorticoid.
[3]Associated with increased susceptibility to infection.

Reporting adverse events is important. It allows continuous safety monitoring of a veterinary medicinal product. Reports should be sent, preferably via a veterinarian, to either the marketing authorisation holder or the national competent authority via the national reporting system. See also section 16 of the package leaflet for contact details.

4.7 Use during pregnancy, lactation or lay

Pregnancy and lactation:
Corticosteroids are not recommended for use in pregnant animals.

4.8 Interaction with other medicinal products and other forms of interaction

Do not use concomitantly with medicines that induce ototoxicity.

4.9 Amount(s) to be administered and administration route

This product is for topical administration. Shake the bottle vigorously and ensure the product is fully resuspended before use.

At the beginning of treatment, hair surrounding or covering the lesions must be clipped; this should be repeated during treatment if necessary.

Ears: Clean the auditory canal and place a few drops of the product into the ear twice daily. For infections caused by *Otodectes cynotis*, instill five drops twice daily for 14 days.
Massage the ear and the auditory canal gently but thoroughly to ensure proper distribution.

Skin: Having ensured the area to be treated is clean, apply a few drops of the product (depending on lesion size) twice a day and rub well.

Treatment should be continued until a few days after complete disappearance of the clinical symptoms. In some obstinate cases, treatment may be required for 2 to 3 weeks (see also 4.6).

Where ear mite infestation is present, consideration should be given to treating both ears even if infestation is only apparent in one ear.

4.10 Overdose (symptoms, emergency procedures, antidotes), if necessary

In case of overdose, no other adverse events are known other than those mentioned in section 4.6. In case of accidental ingestion by licking, no toxic effects were observed.

4.11 Withdrawal period(s)

Not applicable.

5. PHARMACOLOGICAL PROPERTIES

Pharmacotherapeutic group: Otologicals, Corticosteriods and antiinfectives in combination
ATCvet code: QS02CA01

5.1 Pharmacodynamic properties

Polymyxin B
Polymyxin B belongs to the polypeptide antibiotics which are isolated from bacteria. It is only active against Gram-negative bacteria, such as *Pseudomonas* spp., Enterobacter, *E. coli*, *Salmonella* spp., and *Shigella* spp. The mechanism of action is damage of the microbial cytoplasmic membrane, because polypeptides act as cationic detergents. This results bactericidal effect.
Resistance of Gram-negative bacteria to polymyxin may result from chromosomal mutations or horizontal transfer of the *MCR* gene. All *Proteus* species have a natural resistance to polymyxin.

Miconazole
Miconazole belongs to the group of N-substituted imidazole derivatives. Their most important mechanism of action is the inhibition of ergosterol biosynthesis. Ergosterol is an essential membrane lipid and must be synthesised *de novo* by fungi. The lack of ergosterol impedes numerous membrane functions and ultimately leads to cell death. The spectrum of activities covers nearly all fungi and yeasts of relevance to veterinary medicine as well as Gram-positive bacteria.
Practically no development of resistance has been reported. Miconazole has a fungistatic mode of action, but high concentrations are also observed to produce fungicidal effects.

Prednisolone
Prednisolone is a synthetic corticosteroid and is used for its anti-inflammatory, anti-pruritic, anti- exudative and anti-proliferative effects.
This quickly leads to a symptomatic relief in inflammatory skin diseases.

Its anti-inflammatory activity is approx. 4 - 5 times more potent than that of natural cortisol.
Like other glucocorticoids, prednisolone binds to intracellular cytoplasmic receptors in the target organs. After the translocation of the receptor complex into the nucleus it causes derepression of the DNA and subsequently an increase in mRNA synthesis and ultimately protein synthesis. This increases the number of catabolic enzymes for gluconeogenesis. Inhibitory proteins, such as the phospholipase A2-inhibiting lipocortin, are formed. Consequently, the typical glucocorticoid effects and the associated effects are observed. Effects are noticeable only after a latency period. They persist beyond the elimination of the glucocorticoid from the bloodstream as long as there are receptor-glucocorticoid complexes in the nucleus present.

5.2 Pharmacokinetic particulars

Polymyxin B
After topical application of polymyxin B, there is virtually no absorption of the ingredient through intact skin and mucous membranes, but significant absorption via wounds.

Miconazole
After topical application of miconazole, there is virtually no absorption of the ingredient through intact skin or mucous membranes.

Prednisolone
After topical application of prednisolone to intact skin, the ingredient is subject to limited and delayed absorption. Greater proportion of the applied ingredient can be absorbed in cases of compromised skin barrier function (e.g. skin lesions).

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Silica, colloidal anhydrous
Paraffin, liquid

6.2 Major 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: 6 months

6.4 Special precautions for storage

Store below 25 °C. Store in the original container in order to protect from light.

6.5 Nature and composition of immediate packaging

Folding box consist of:
- white bottle 15 ml, made of low density polyethylene (LDPE)
- white dropper, made of low density polyethylene (LDPE)
- white screw closure with tamper proof ring, made of high density polyethylene (HDPE)

6.6 Special precautions for the disposal of unused veterinary medicinal product or waste materials derived from the use of such products

Medicines should not be disposed of via wastewater.

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 AUTHORISATION HOLDER

KRKA, d.d., Novo mesto
Smarjeska cesta 6
8501 Novo mesto
Slovenia

8. MARKETING AUTHORISATION NUMBER

Vm 01656/5072

9. DATE OF FIRST AUTHORISATION

12 June 2024

10. DATE OF REVISION OF THE TEXT

June 2024

PROHIBITION OF SALE, SUPPLY AND/OR USE

11. CLASSIFICATION OF VETERINARY MEDICINAL PRODUCT

Veterinary medicinal product subject to prescription.

Find more product information by searching for the ‘Product Information Database’ or ‘PID’ on www.gov.uk.

Gavin Hall
Approved: 12 June 2024