Aurizon®, JUST A SIMPLE ONCE-A-DAY DOSE FOR RAPID CLINICAL SUCCESS

Veterinary Guide to Aurizon®
Vetoquinol & Aurizon®
Leading the way forward in the treatment of otitis externa

With the launch of Aurizon®, Vetoquinol brought a unique option for the treatment of otitis externa to you the vet. Using Aurizon® you can offer your patients and their owners high cure levels, the convenience of once-a-day application, and the confidence of fast pain relief.

“Fast pain relief, high clinical cure levels, once daily application”
**Aurizon®**

The technology that delivers the benefits

**The active ingredients:**

Marbofloxacin, Clotrimazole, Dexamethasone

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**Marbofloxacin**

Used exclusively in veterinary medicine, marbofloxacin is a third generation fluoroquinolone and is the first molecule in its class to be licensed for topical use in otitis externa. In the form of Marbocyl P tablets and Marbocyl SA injection, marbofloxacin is already a well known and trusted antibiotic.

**Key points on marbofloxacin**

- Marbofloxacin has a bactericidal action that destroys DNA at the heart of the bacterial cell.
- Allows you to reduce reliance on topical aminoglycoside antibiotics.
- Uniquely also available for systemic use. (Marbocyl P (palatable) Tablets & SA Injection)
- When used systemically the safety profile compares well to that of many of the aminoglycoside antibiotics frequently used in other ear preparations.

The broad spectrum of marbofloxacin affords the level of confidence you need in Otitis externa:

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**Clotrimazole**

Antifungal/anti-yeast activity is required in many cases of otitis externa. Clotrimazole delivers the performance you need.

**Key points on Clotrimazole**

- Clotrimazole is a well-researched antifungal agent.
- In a number of studies, Clotrimazole has demonstrated superior activity against Malassezia pachydermatis compared with nystatin and miconazole.

**Sensitivity of 62 strains of Malassezia pachydermatis to a range of commonly used antifungal agents**

<table>
<thead>
<tr>
<th>Antifungal</th>
<th>MIC&lt;sub&gt;90&lt;/sub&gt; (μg/ml)</th>
<th>% resistant strains</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clotrimazole</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Nystatin</td>
<td>40</td>
<td>7</td>
</tr>
<tr>
<td>Miconazole</td>
<td>20</td>
<td>2</td>
</tr>
</tbody>
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**Dexamethasone**

Anti-inflammatory activity is vital for a successful outcome in many cases of otitis externa. As a proven and trusted anti-inflammatory, Dexamethasone is the third and final ingredient of Aurizon®.

**Key points on Dexamethasone**

- Helps break the destructive cycle of pain, irritation and self trauma.
- Reduces inflammation, which is vital if the normal architecture of the ear is to be restored.

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Clinical cure rates
With Aurizon®, excellent efficacy means high clinical cure rates.
In a randomised, comparative, blinded study using 15 centres throughout Europe, 140 dogs with acute or subacute otitis externa showed excellent results when treated with Aurizon®. Aurizon® was compared with a UK licensed preparation containing a combination of polymixin, miconazole and prednisolone. Both products were given according to their approved dosages with Aurizon® being used just once daily and the reference product twice daily. If not considered cured after 7 days, a further 7 days of treatment was given. No additional treatment other than ear cleaning was permitted.

Fast pain relief
With Aurizon®, excellent efficacy in otitis also means fast pain relief
In the same comparative study, Aurizon® treated dogs were shown to be in significantly less pain than those treated with the reference product.

The statistically significant benefits seen in the Aurizon® group when compared with those treated with the reference product were:
- Superior overall clinical response rate
- Superior pain control
- Reduction in amount of pus produced

Further benefits
Aurizon® also offers other features to aid ease of application and increase effectiveness
- Soft cannula to reduce pain on application
- See-through cannula to make application easier for owners
- Low viscosity, micronised, suspension improves spreading of Aurizon® throughout the ear canal
- Ceruminolytic base to aid break-up of wax

Aurizon® EAR DROPS SUSPENSION - TREATMENT FOR OTITIS EXTERNA IN DOGS – 20 ML
MARBOFLOXACIN – CLOTRIMAZOLE – DEXAMETHASONE ACETATE

ACTIVE CONSTITUENTS
Each mL contains 3 mg marbofloxacin, 10 mg clotrimazole and 1 mg dexamethasone acetate.

For the treatment of otitis externa in dogs of both bacterial and fungal origin respectively due to bacteria sensitive to marbofloxacin and fungi, especially Malassezia pachydermatis, sensitive to clotrimazole.

PHARMACOLOGY

Marbofloxacin is a synthetic bactericidal agent belonging to the fluoroquinolone family that acts by inhibiting DNA gyrase. It exhibits a broad spectrum of activity against Gram-positive bacteria (e.g., Staphylococcus intermedius) and against Gram-negative organisms (Pseudomonas aeruginosa, Escherichia coli and Proteus mirabilis).

Pharmacokinetic studies in dogs at the therapeutic dosage have shown that marbofloxacin plasma concentrations peak at 0.06 μg/mL on the 14th day of treatment. Marbofloxacin binds weakly to plasma proteins (~10% in dogs) and is eliminated slowly, mainly in the active form, with over 2/3 being excreted in the urine and 1/3 in the faeces.

Clotrimazole is a broad-spectrum antifungal agent that is used for the treatment of dermal infections caused by various species of pathogenic dermatophytes and yeasts. The primary action of clotrimazole is against dividing and growing organisms. In vitro, clotrimazole exhibits fungistatic and fungicidal activity against isolates of Trichophyton rubrum, Trichophyton mentagrophytes, Epidermophyton floccosum, Microsporum canis, Candida spp., and Malassezia pachydermatis.

Resistence to clotrimazole is very rare among the fungi that cause superficial mycosis. In studies on the mechanism of action, the minimum fungicidal concentration of clotrimazole caused leakage of intracellular phosphorus compounds in the ambient medium with concomitant breakdown of cellular nucleic acids and accelerated potassium efflux. These events began rapidly and extensively after addition of the drug. Clotrimazole is very poorly absorbed following dermal application (plasma concentration <0.04 μg/mL).

Dexamethasone acetate is a synthetic glucocorticoid exhibiting anti-inflammatory and antipruritic activity. Topical corticosteroids can be absorbed from normal intact skin. Once absorbed through the skin, topical corticosteroids are handled through the pharmacokinetic pathways similar to systemically administered corticosteroids. Dexamethasone acetate plasma concentrations reached 1.25 mg/mL on the 14th day of treatment. Dexamethasone absorption was not increased by the inflammatory process induced by otitis.

INDICATIONS
Aurizon® is indicated for the treatment of otitis externa in dogs of both bacterial and fungal origin respectively due to bacteria sensitive to marbofloxacin and fungi, especially Malassezia pachydermatis, sensitive to clotrimazole.

After verifying that the eardrum is intact, shake well and instil drops as follows:
- Apply ten drops into the ear once daily for 7 to 14 days.
- After 7 days of treatment, the veterinary surgeon should evaluate the necessity to extend the treatment for a further 7 days.
- After application the base of the ear may be massaged briefly and gently to allow the preparation to penetrate the lower part of the ear canal.

SAFETY DIRECTIONS

Harmful if swallowed. May irritate the eyes and the skin. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. If product in eyes, wash it out immediately with water. Wash hands after use.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131 126.

PRESENTATION
1 x 20 mL bottle with 2 cannulae

DISPOSAL

Dispose of empty container by wrapping with paper and putting in garbage.

STORAGE

Store below 25°C (Air conditioning). Protect from light. Do not freeze.

APVMA Approval No. 67225/55519

CONTAININDICATIONS AND PRECAUTIONS/SPECIAL PRECAUTIONS

FOR USE SEE PACK INSERT FOR COMPLETE INFORMATION

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