[Version 9.1,11/2024]

ANNEX I

SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

AURIZON ear drops, suspension

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml contains:

Active substances:

Marbofloxacin	3.0 mg
Clotrimazole	10.0 mg
Dexamethasone	0.9 mg
(equivalent to dexamethasone acetate	1.0 mg)

Excipients:

Qualitative composition of excipients and other constituents	**Quantitative composition if that information is essential for proper administration of the veterinary medicinal product**
Propyl gallate (E310)	1.0 mg
Sorbitan oleate	
Silica, hydrophobic colloidal	
Triglycerides, medium-chain	

Homogenous beige to yellow oily suspension.

3. CLINICAL INFORMATION

3.1 Target species

Dogs.

3.2 Indications for use for each target species

Treatment of otitis externa of both bacterial and fungal origin - respectively due to bacteria sensitive to marbofloxacin, and fungi especially *Malassezia pachydermatis* sensitive to clotrimazole.

The veterinary medicinal product should be used based on susceptibility testing results.

3.3 Contraindications

Do not use in dogs suffering from perforation of the tympanic membrane.

Do not use in cases of hypersensitivity to the active substances, other azole antifungals or fluoroquinolones, or to any of the excipient.

3.4 Special warnings

None.

3.5 Special precautions for use

Special precautions for safe use in the target species:

Heavy reliance on a single class of antibiotic may result in the induction of resistance in a bacterial population. It is prudent to reserve the fluoroquinolones for the treatment of clinical conditions which have responded poorly, or are expected to respond poorly, to other classes of antibiotics.

Before treating with the veterinary medicinal product, the integrity of the tympanic membrane must be verified.
The external ear canal should be meticulously cleaned and dried before treatment.

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

Wash hands carefully after applying the veterinary medicinal product.

Avoid contact with eyes. In case of accidental contact with the eyes, rinse with copious amounts of water.

People with known hypersensitivity to the active substances or excipients should avoid contact with the veterinary medicinal product.

Special precautions for the protection of the environment:

Not applicable.

3.6 Adverse events

Dogs:

Rare (1 to 10 animals / 10,000 animals treated):	Deafness[1]
Very rare (<1 animal / 10,000 animals treated, including isolated reports):	Changes in biochemical and haematological parameters (such as Elevated serum alkaline phosphatase (ALP)[2]; Elevated alanine aminotransferase (ALT)[2]; Elevated aspartate aminotransferase (AST)[2]; Neutrophilia (limited)[2]), Skin thinning[3]
Undetermined frequency (cannot be estimated from the available data):	Delayed healing[3], Hypoadrenocorticism[3,4]

[1] *Mainly in elderly dogs and mostly of a transient nature.*
[2] *Usual adverse effects of corticosteroids.*
[3] *Known adverse effects of topical corticosteroids in case of prolonged and intensive use.*
[4] *Suppression of adrenal function.*

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 its local representative or the national competent authority via the national reporting system. See the package leaflet for respective contact details.

3.7 Use during pregnancy, lactation or lay

Pregnancy and lactation:

Do not use during pregnancy or during lactation.

3.8 Interaction with other medicinal products and other forms of interaction

None known.

3.9 Administration routes and dosage

Auricular use.

Shake well before use.

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 another week.

One drop of the veterinary medicinal product contains 71 µg marbofloxacin, 237 µg clotrimazole and 23.7 µg dexamethasone acetate.

After application, the base of the ear may be massaged briefly and gently to allow the veterinary medical product to penetrate to the lower part of the ear canal.

When the veterinary medicinal product is intended for use in several dogs, use one cannula per dog.

3.10 Symptoms of overdose (and where applicable, emergency procedures and antidotes)

Changes in biochemical and hæmatological parameters (such as increase of alkaline phosphatase, aminotransferase, some limited neutrophilia, eosinopenia, lymphopenia) are observed with three fold the recommended dosage; such changes are not serious and will reverse once the treatment has stopped.

3.11 Special restrictions for use and special conditions for use, including restrictions on the use of antimicrobial and antiparasitic veterinary medicinal products in order to limit the risk of development of resistance

Not applicable.

3.12 Withdrawal periods

Not applicable.

4. PHARMACOLOGICAL INFORMATION

4.1 ATCvet code :

QS02CA06.

4.2 Pharmacodynamics

The veterinary medicinal product combines three active ingredients:

- Marbofloxacin, 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*).
- Clotrimazole, an anti-fungal agent that belongs to the imidazole family and which acts by causing changes in membrane permeability, allowing intracellular compounds to leak from the cell and thus inhibiting cellular molecular synthesis. It exhibits a wide spectrum of activity and is aimed, in particular, at *Malassezia pachydermatis*;
- Dexamethasone acetate, a synthetic glucocorticoid exhibiting anti-inflammatory and anti-pruritic activity.

4.3 Pharmacokinetics

Pharmacokinetics 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 bonds weakly to plasma proteins (< 10% in dogs) and is eliminated slowly, mainly in the active form, over 2/3 in urine and over 1/3 in faeces.

Clotrimazole absorption is extremely poor (plasma concentration < 0.04 µg/ml).

Dexamethasone acetate plasma concentration reaches 1.25 ng/ml on the 14^{th} day of treatment. Dexamethasone resorption is not increased by the inflammatory process induced by otitis.

5. PHARMACEUTICAL PARTICULARS

5.1 Major incompatibilities

None known.

5.2 Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: 2 years.

Shelf life after first opening the immediate packaging: 2 months.

5.3 Special precautions for storage

Do not store above 30 °C.

5.4 Nature and composition of immediate packaging

10, 20 or 30 mL low-density polyethylene (LDPE) bottle with a low-density polyethylene nozzle and a threaded polypropylene (PP) cap and 1, 2 or 3 PVC cannulae in a cardboard box.

Box containing one 10 ml bottle with 1 cannula.
Box containing one 20 ml bottle with 2 cannulae.
Box containing one 30 ml bottle with 3 cannulae.

Not all pack sizes may be marketed.

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

Medicines should not be disposed of via wastewater or household waste.

Use take-back schemes for the disposal of any unused veterinary medicinal product or waste materials derived thereof in accordance with local requirements and with any national collection systems applicable to the veterinary medicinal product concerned.

6. NAME OF THE MARKETING AUTHORISATION HOLDER

[To be completed Nationally]

7. MARKETING AUTHORISATION NUMBER(S)

[To be completed Nationally]

8. DATE OF FIRST AUTHORISATION

Date of first authorisation: 19/12/2000.

9. DATE OF THE LAST REVISION OF THE SUMMARY OF THE PRODUCT CHARACTERISTICS

{MM/YYYY}

10. CLASSIFICATION OF VETERINARY MEDICINAL PRODUCTS

Veterinary medicinal product subject to prescription.

Detailed information on this veterinary medicinal product is available in the Union Product Database (https://medicines.health.europa.eu/veterinary).

ANNEX III

LABELLING AND PACKAGE LEAFLET

A. LABELLING

PARTICULARS TO APPEAR ON THE OUTER PACKAGE

Cardboard box for 10 ml (or 20 ml or 30 ml)

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

AURIZON ear drops, suspension

2. STATEMENT OF ACTIVE SUBSTANCES

Each ml contains:

Active substances:

Marbofloxacin	3.0 mg
Clotrimazole	10.0 mg
Dexamethasone	0.9 mg
(equivalent to dexamethasone acetate	1.0 mg)

EN/Latin

3. PACKAGE SIZE

10 ml
20 ml
30 ml

4. TARGET SPECIES

Dogs.

5. INDICATIONS

6. ROUTES OF ADMINISTRATION

Auricular use.

7. WITHDRAWAL PERIODS

8. EXPIRY DATE

Exp. {mm/yyyy}

Once opened use within 2 months.

9. SPECIAL STORAGE PRECAUTIONS

Do not store above 30°C.

10. THE WORDS "READ THE PACKAGE LEAFLET BEFORE USE"

Read the package leaflet before use.

11. THE WORDS "FOR ANIMAL TREATMENT ONLY"

For animal treatment only.

12. THE WORDS "KEEP OUT OF THE SIGHT AND REACH OF CHILDREN"

Keep out of the sight and reach of children.

13. NAME OF THE MARKETING AUTHORISATION HOLDER

[To be completed Nationally]

14. MARKETING AUTHORISATION NUMBERS

[To be completed Nationally]

15. BATCH NUMBER

Lot {number}

Vetoquinol logo

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS

Label for 10 (or 20 or 30) ml vial

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

AURIZON ear drops, suspension

2. QUANTITATIVE PARTICULARS OF THE ACTIVE SUBSTANCES

Each ml contains:

Active substances:

Marbofloxacin..... 3.0 mg
Clotrimazole ..... 10.0 mg
Dexamethasone ..... 0.9 mg
(equivalent to dexamethasone acetate 1.0 mg)
EN/Latin

3. BATCH NUMBER

Lot {number}

4. EXPIRY DATE

Exp. {mm/yyyy}

Once opened use within 2 months.

Vetoquinol logo

B. PACKAGE LEAFLET

PACKAGE LEAFLET

1. Name of the veterinary medicinal product

AURIZON ear drops, suspension

2. Composition

Each ml contains:

Active substances:

Marbofloxacin	3.0 mg
Clotrimazole	10.0 mg
Dexamethasone	0.9 mg
(equivalent to dexamethasone acetate	1.0 mg)

EN/Latin

Excipients:

Propyl gallate (E310)	1.0 mg

Homogenous beige to yellow oily suspension.

3. Target species

Dogs.

4. Indications for use

Treatment of otitis externa of both bacterial and fungal origin - respectively due to bacteria sensitive to marbofloxacin, and fungi especially *Malassezia pachydermatis* sensitive to clotrimazole.

The veterinary medicinal product should be used based on susceptibility testing results.

5. Contraindications

Do not use in dogs suffering from perforation of the tympanic membrane.

Do not use in cases of hypersensitivity to the active substances, other azole antifungals or fluoroquinolones, or to any of the excipient.

6. Special warnings

Special precautions for safe use in the target species:

Heavy reliance on a single class of antibiotic may result in the induction of resistance in a bacterial

population. It is prudent to reserve the fluoroquinolones for the treatment of clinical conditions which have responded poorly, or are expected to respond poorly, to other classes of antibiotics.

Before treating with the veterinary medicinal product, the integrity of the tympanic membrane must be verified. The external ear canal should be meticulously cleaned and dried before treatment.

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

Wash hands carefully after applying the veterinary medicinal product.

Avoid contact with eyes. In case of accidental contact with the eyes, rinse with copious amounts of water.

People with known hypersensitivity to the active substances or excipients should avoid contact with the veterinary medicinal product.

Pregnancy and lactation:

Do not use during pregnancy or during lactation.

Overdose:

Changes in biochemical and hæmatological parameters (such as increase of alkaline phosphatase, aminotransferase, some limited neutrophilia, eosinopenia, lymphopenia) are observed with three fold the recommended dosage; such changes are not serious and will reverse once the treatment has stopped.

7. Adverse events

Dogs:

Rare (1 to 10 animals / 10,000 animals treated):
Deafness[1]
Very rare (<1 animal / 10,000 animals treated, including isolated reports):
Changes in biochemical and haematological parameters (such as Elevated serum alkaline phosphatase (ALP)[2]; Elevated alanine aminotransferase (ALT)[2]; Elevated aspartate aminotransferase (AST)[2]; Neutrophilia (limited)[2]), Skin thinning[3]
Undetermined frequency (cannot be estimated from the available data):
Delayed healing[3], Hypoadrenocorticism[3,4]

[1] *Mainly in elderly dogs and mostly of a transient nature.*
[2] *Usual adverse effects of corticosteroids.*
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[4] *Suppression of adrenal function.*

Reporting adverse events is important. It allows continuous safety monitoring of a product. If you notice any side effects, even those not already listed in this package leaflet, or you think that the medicine has not worked, please contact, in the first instance, your veterinarian. You can also report any adverse events to the marketing authorisation holder or its local representative using the contact details at the end of this leaflet, or via your national reporting system:
To be completed Nationally

8. Dosage for each species, routes and method of administration

Auricular use.

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 another week.
One drop of the veterinary medicinal product contains 71 µg marbofloxacin, 237 µg clotrimazole and 23.7 µg dexamethasone acetate.

After application, the base of the ear may be massaged briefly and gently to allow the veterinary medical product to penetrate to the lower part of the ear canal.

9. Advice on correct administration

Shake well before use.

When the veterinary medicinal product is intended for use in several dogs, use one cannula per dog.

10. Withdrawal periods

Not applicable.

11. Special storage precautions

Keep out of the sight and reach of children.

Do not store above 30°C.

Do not use this veterinary medicinal product after the expiry date which is stated on the label or carton after Exp. The expiry date refers to the last day of that month.

Shelf life after first opening the immediate packaging: 2 months.

12. Special precautions for disposal

Medicines should not be disposed of via wastewater or household waste.

Use take-back schemes for the disposal of any unused veterinary medicinal product or waste materials derived thereof in accordance with local requirements and with any applicable national collection systems. These measures should help to protect the environment.

13. Classification of veterinary medicinal products

Veterinary medicinal product subject to prescription.

14. Marketing authorisation numbers and pack sizes

To be completed Nationally

Box containing 1 x 10 ml bottle and 1 cannula.

Box containing 1 x 20 ml bottle and 2 cannulae.
Box containing 1 x 30 ml bottle and 3 cannulae.

Not all pack sizes may be marketed.

15. Date on which the package leaflet was last revised

{MM/YYYY}

Detailed information on this veterinary medicinal product is available in the Union Product Database (https://medicines.health.europa.eu/veterinary).

16. Contact details

Marketing authorisation holder *or* Local representatives and contact details to report suspected adverse events:

To be completed Nationally

Manufacturer responsible for batch release:

Vetoquinol S.A.
Magny-Vernois
70200 Lure
France

For any information about this veterinary medicinal product, please contact the local representative of the marketing authorisation holder.

17. Other information

Pharmacodynamics

The veterinary medicinal product combines three active ingredients:

- Marbofloxacin, 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*).
- Clotrimazole, an anti-fungal agent that belongs to the imidazole family and which acts by causing changes in membrane permeability, allowing intracellular compounds to leak from the cell and thus inhibiting cellular molecular synthesis. It exhibits a wide spectrum of activity and is aimed, in particular, at *Malassezia pachydermatis*;
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