# ΠΑΡΑΡΤΗΜΑ 1: ΠΕΡΙΛΗΨΗ ΤΩΝ ΧΑΡΑΚΤΗΡΙΣΤΙΚΩΝ ΤΟΥ ΠΡΟΪΟΝΤΟΣ

#### 1. NAME OF THE VETERINARY MEDICINE

OXYTER 200 BMP – premix for medicated feed in granular powder for swine, rabbits and fish

#### 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each kilogram contains: Active substance: Oxytetracycline 200g

Excipients:

For the full list of excipients, see section 6.1

#### 3. PHARMACEUTICAL FORM

Premix for medicated feed in granular form.

#### 4. CLINICAL PARTICULARS

#### 4.1 Target species

Swine, rabbits and fish.

### 4.2 Indications for use, specifying the target species

Against infections caused by bacteria sensitive to tetracycline, in particular:

- **Swine**: for the treatment of intestinal and respiratory bacterial diseases (Gram positive aerobic: *Erysipelotrix r. Listeria m. Staphylococcus a., Streptococcus suis;* Gram negative anaerobic: *Actinobacillus pleuropneumoniae, Bordetella b., E.Coli, Haemophilus* spp; *Klebsiella p. Leptospira* spp., *Pasterurella m., Pseudomonas a., Salmonella* spp., Bacteria anaerobic: *Actinomyces* spp., *Clostridium* spp., Mycoplasma: *M. Hyopneumoniae, M.hyorhinis, M.hyosinoviae*.
- **Rabbits**: colibacillosis (*E. coli*), pasteurellosis (*Pasteurella h.*), salmonellosis (*Salmonella* spp.)
- **Fish**: bacterial diseases (*Lattococcus g., Streptococcus i., Vagococcus s., Vibrio* spp.)

# 4.3 Contraindications

Do not use in case of hypersensitivity to tetracyclines or to any of the excipients; in animals with liver pathologies, the administration has to be done under veterinary control.

# 4.4 Special warnings for each target species

In monogastric animals, oxytetracycline can reduce the synthesis and the bioavailability of vitamins group B and K. The consumption of the drug by animals can be adjusted as per the disease. Sick animals may have a reduce intake of medicated feed, and should be treated parentally with a suitable injectable product, suggested by the veterinarian.

### 4.5 Special precautions for use

#### Special precautions for use in animals

The use of the product must be based on a sensitive test, in accordance with local requirements, related to antimicrobial substances.

In breeding conditions administer the product with caution in order to avoid stress conditions, improving the management usual procedures and disinfections.

Repeated and long term use of the antibiotic must be avoided.

Inappropriate use of the product may lead to development of bacteria resistance to oxytetracycline and reduction of efficacy of the treatment with other tetracyclines, caused by the possible appearance of cross resistance.

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

The veterinary medicinal product has a control emission factor with reduction of dust exposure risks; nevertheless, it is suggested to avoid inhalation and direct contact; Personal protective equipment consisting of mask should be worn when handling the veterinary medicinal product...

In case of accidental contact wash with water and soap. Do not eat, drink or smoke during administering the product, wash hands after use.

Persons with known hypersensitivity to the active substance should avoid contact with the veterinary medicinal product.

# 4.6 Adverse reactions (frequency and gravity)

Unknown.

### 4.7 Use during pregnancy, lactation or lay

In rabbits, during the first stage of pregnancy, the administration of the veterinary medicinal product should be avoided, since it may lead to foetal absorption. In all other species, any use of the product during pregnancy should be limited accordingly to the benefit/risk assessment by the responsible veterinarian.

# 4.8 Interaction with other veterinary medicines and other forms of interaction

The absorption of oxytetracycline is reduced by the simultaneous presence of calcium and magnesium ions. Avoid the administration of minerals and products based on calcium and magnesium use. If it's possible, use a feed poor in these two elements.

Do not administer together with bactericidal antibiotics such as penicillin, aminoglycosides and relative substances.

#### 4.9 Amounts to be administrated and administration route

The veterinary medicinal product has to be accurately administered in feed, for 7-10 days in fish and for 3-5 days in other species as per veterinary prescription at daily dose.

The concentration in feed has to be adjusted accordingly to real animal weigh and effective consumption of feed. Be careful not to exceed the recommended dosage in mg/kg b.w (body weight).

**Pigs**: 2.0-12.5g/kg of feed (equal to 20-50mg oxytetracycline/kg b.w.) at the following rates:

2.0-5.0g/kg of feed for swine with a feed intake of 5% rate of their b.w. 3.5-8.0g/kg of feed for swine with a feed intake of 3% rate of their b.w. 5.0-12.5g/kg of feed for swine with a feed intake of 2% rate of their b.w.

Rabbits: 2.75-7.70g/kg of feed (equal to 40-80mg oxytetracycline/kg b.w.)

Fish: 17.5-37.5g/kg of feed (equal to 75mg oxytetracycline/kg b.w.)

In order to avoid an over/under dosage, the real animal weight has to be determined accurately.

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

Toxic effects associated with over dosage are not known. It is suggested not to exceed the recommended dosages.

#### 4.11 Withdrawal periods

Meat and offal: Swine 12 days – rabbits 8 days – fish 500 grades/day. Not authorized for use in fish producing eggs for human use.

#### 5. PHARMACOLOGICAL PROPERTIES

Pharmacoterapeutic group: antibiotic

ATCvet code: QJ01AA06

### 5.1 Pharmacodynamic properties

Oxytetracycline is a broad spectrum antibiotic. Thanks to its very high affinity to the bacterial ribosomal subunit 30S, the time-dependent bacteriostatic activity inhibits the bacterial synthesis of proteins. It is active against Gram-positive and at higher dosages, against Gram-negative bacteria.

#### **Gram-positive aerobic:**

Erysipelotrix r.:  $MIC^*_{90}$  0.25 $\mu$ g/ml Listeria m.:  $MIC_{90}$  1.0 $\mu$ g/ml Lattococcus g.: MIC < 4 $\mu$ g/ml

Staphylococcus a.: MIC<sub>90</sub> > 64µg/ml Streptococcus iniae: MIC < 4µg/ml Steprococcus suis: MIC<sub>90</sub> 64µg/ml Vagococcus s.: MIC < 4µg/ml

# **Gram-negative anaerobic:**

Actinobacillus pleuropneumoniae: MIC<sub>90</sub> ≤ 0.25µg/ml

Aeromonas spp. MIC < 4µg/ml Bordetella b.: MIC<sub>90</sub> ≥ 16µg/ml

E. coli:  $MIC_{90} \ge 64\mu g/ml$ 

Haemophilus spp.: MIC<sub>90</sub> 0.5-2.0µg/ml

Klebsiella p.:  $MIC_{90} \ge 64\mu g/ml$ Leptospira spp.:  $MIC_{90} 4\mu g/ml$  Pasteurella m.:  $MIC_{90}$  1 $\mu$ g/ml Pseudomonas a.:  $MIC_{90} \ge 16\mu$ g/ml Salmonella spp.:  $MIC_{90} \ge 16\mu$ g/ml Yersinia ruckeri:  $MIC < 4\mu$ g/ml

# Other bacteria (optional anaerobic or anaerobic):

Actinomyces spp.: MIC<sub>90</sub> 1µg/ml Chlamydia spp.: MIC 0.01-0.5µg/ml Clostridium spp: MIC<sub>90</sub> 8µg/ml Vibrio spp.: MIC < 4µg/ml

# Micoplasma and Ureaplasma:

M. hyopneumoniae: MIC<sub>90</sub> 0.03µg/ml

M. hyorhinis: MIC<sub>90</sub> 1μg/ml M. hyosinoviae: MIC<sub>90</sub> 32μg/ml Ureaplasma spp.: MIC<sub>90</sub> 0.06μg/ml

Any resistance frequently recognized relates to a plasmid-mediate type.

Usually, the resistant micro-organisms are the same also for the other compounds of the group (cross resistance); cross resistance with other antibiotics has a minor relevance.

#### 5.2 Pharmacokinetic particulars

Oxytetracycline is slightly toxic.

After oral administration, it is rapidly absorbed and reaches levels in tissues that ensure systemic antibacterial concentrations in all animal species.

The plasma concentration is stable at an active level for about 6-8 hours after administration. Oxytetracycline has excellent distribution properties, except in the central nervous system.

#### Swine:

Vd (Volume of Distribution) 1.495±0.099L/Kg; (t½) half-life time: 5.33 hr

<u>Rabbit</u>: AUC = 11.04  $\pm$  7.37 µg.h/ml; Cmax = 0.65 µg/ml;  $T_{max}$  = 2.29  $\pm$  1.25 hr;  $t\frac{1}{2}$ : 2.05 $\pm$ 1.07hr

<u>Fish</u>: AUC = 383.4-25  $\mu$ g·h/ml;

 $\overline{T_{\text{max}}}$  = 15-12 hr; Cmax= 6.0 ± 0.7-2.0 µg/ml;  $t\frac{1}{2}$ : 50.2-74.9hr

Oxytetracycline is excreted mainly in kidneys, in an active form (about 30% of the administered dose); it undergoes enterohepatic circulation and does not appear to be metabolised to any significant degree. The compound is mainly excreted as the parent molecule primarily in the urine but also in the faeces.

# 6. PHARMACEUTICAL PARTICULARS

<sup>\*</sup>Sub-Minimum Inhibitory Concentration (MIC)

# 6.1 List of excipients

Light liquid paraffin (Vaseline oil) Liquid sorbitol Hazel nut fiber

# 6.2 Incompatibilities

In the absence of compatibility studies, this veterinary medicinal product must not be mixed with other veterinary medicinal products.

#### 6.3 Shelf life

Shelf life of the veterinary product as packaged for sale: 2 years Shelf life after first opening the immediate packaging: 30 days Shelf life after incorporation into meal or pelleted feed: 60 days

# 6.4 Special precautions for storage

This veterinary medicinal product does not require any special storage conditions. Store in a dry place.

After first opening and use, keep the container tightly closed in order to protect from moisture.

# 6.5 Nature and composition of immediate packaging

20kg of Polyethylene (PE) bags with multiple layers of paper and internal aluminated part.

# 6.6 Special precautions for the disposal of the unused veterinary medicinal products 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 Authorisation Holder

DOX-AL ITALIA SPA Piazzale Cadorna 10-20123 Milano Tel. +39 039 6205 1 Fax +39 039 6205 400

# 8. Marketing authorization number

17395

#### 9. Date of first authorization / renewal of the authorization

Date of first authorization: 05.11.1997 Date of last renewal: 16.06.2006

# 10. Date of revision of the text

18/12/2017

**PROHIBITION OF SALE, SUPPLY AND/OR USE**Consideration should be given to official guidance on the incorporation of medicated premixes in final feeds.

# Mode of use

To be sold and used only upon veterinary prescription.