

## **SUMMARY OF THE PRODUCT CHARACTERISTICS**

### **1. NAME OF THE VETERINARY MEDICINAL PRODUCT**

PETALEXIN 75 mg tablets for dogs and cats

### **2. QUALITATIVE AND QUANTITATIVE COMPOSITION**

One tablet contains:

-Active substance

Cefalexin .....75 mg  
(as Cefalexin Monohydrate)

For the full list of excipients see section 6.1.

### **3. PHARMACEUTICAL FORM**

Tablets.

Creamy oblong tablets with small brown spots with a score-line.

The tablets can be divided into halves.

### **4. CLINICAL PARTICULARS**

#### **4.1 Target species**

Dogs and cats.

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

For the treatment of bacterial skin infections in dogs (including deep and superficial pyodermas) caused by organisms susceptible to Cefalexin.

For the treatment of cutaneous and subcutaneous infections (wounds and abscesses) in cats caused by organisms susceptible to Cefalexin.

For the treatment of urinary-tract infections in cats and dogs (including nephritis and cystitis) caused by organisms susceptible to Cefalexin.

#### **4.3 Contra-indications**

Do not use in animals which are known to be hypersensitive to penicillins and cephalosporins.

Do not use in rabbits, guinea pigs, hamsters and gerbils.

Do not use in known cases of hypersensitivity to the active substance, to other cephalosporins, to other substances of the  $\beta$ -lactam group or to any of the excipients.

#### **4.4 Special warnings for each target species**

None.

#### **4.5 Special precautions for use**

##### Special precautions for use in animals

As with other antibiotics which are excreted mainly by the kidneys, unnecessary accumulation may occur in the body when renal function is impaired. In case of known renal insufficiency, the dose should be reduced and antimicrobials known to be nephrotoxic should not be administered concurrently.

This product should not be used to treat puppies of less than 1 kg of bodyweight or kittens under 9 weeks of age.

Use of the product deviating from the instructions given in the SPC may increase the prevalence of bacteria resistant to Cefalexin and may decrease the effectiveness of treatment with other cephalosporins and penicillins, due to the potential for cross-resistance.

Use of the product should be based on susceptibility testing of the bacteria isolated from the animal. If this is not possible, therapy should be based on local epidemiological information.

Official, national and regional antimicrobial policies should be taken into account when the product is used.

As the tablets are palatable to animals there is a danger of excessive ingestion. The tablets must therefore be stored out of the reach of animals.

Local treatment of cutaneous and subcutaneous infections in cats should be considered as a complement of the antibiotic treatment.

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

Penicillins and cephalosporins may cause hypersensitivity (allergy) following injection, inhalation, ingestion or skin contact. Hypersensitivity to penicillin may lead to cross sensitivity to cephalosporin and *vice versa*. Allergic reactions to these substances may occasionally be serious.

1- Do not handle this product if you know you are sensitised or if you have been advised not to work with such preparations.

2- Handle this product with great care to avoid exposure, taking all recommended precautions. Take care to avoid prolonged skin contact. Wash hands after use.

3- If you develop symptoms following exposure such as skin rash, you should seek medical advice and show the doctor this warning. Swelling of the face, lips or eyes or

difficulty with breathing are more-serious symptoms and require urgent medical attention.

#### **4.6 Adverse reactions (frequency and seriousness)**

Very rare cases of soft faeces and vomiting may be observed in animals during treatment.

Hypersensitivity to Cefalexin is rare, however, the product should not be administered to animals which are known to be hypersensitive to Cefalexin or penicillin. Refer also to section 4.3.

Allergic cross-reactivity with other  $\beta$ -lactams may occur.

The frequency of adverse reactions is defined using the following convention:

- very common (more than 1 in 10 animals treated displaying adverse reaction(s))
- common (more than 1 but less than 10 animals in 100 animals treated)
- uncommon (more than 1 but less than 10 animals in 1,000 animals treated)
- rare (more than 1 but less than 10 animals in 10,000 animals treated)
- very rare (less than 1 animal in 10,000 animals treated, including isolated reports).

#### **4.7 Use during pregnancy and lactation**

The product can be used in pregnant and lactating animals.

#### **4.8 Interaction with other medicinal products and other forms of interaction**

The association of first-generation cephalosporins with aminoglycoside antibiotics and some diuretics such as furosemide can enhance nephrotoxicity risks.

The bactericidal activity of cephalosporins is reduced by concomitant administration of bacteriostatic acting compounds (tetracyclines, chloramphenicol, macrolides and rifampicin).

#### **4.9 Amounts to be administered and administration route**

15 mg of Cefalexin per kg of bodyweight twice daily (equivalent to 30 mg per kg of bodyweight per day) for a duration of:

- 5 days in case of cutaneous and subcutaneous infections (wounds and abscesses) in cats;
- 14 days in case of urinary-tract infection in cats and dogs;
- at least 15 days in case of superficial infectious dermatitis in dogs;
- at least 28 days in case of deep infectious dermatitis in dogs.

To achieve this dosage, administer:

in cats and dogs:

- Twice daily, one tablet per 5 kg of bodyweight or  $\frac{1}{2}$  tablet per 2.5 kg of bodyweight.

To ensure correct dosage, bodyweight should be determined as accurately as possible to avoid underdosing.

Due to its palatable formulation, the product is well accepted by cats and dogs but may be crushed or added to food if necessary.

In severe or acute conditions, the dose may be safely doubled.

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

Trials performed on animals with up to 5 times the recommended dose of 15 mg/kg demonstrated that the product is well tolerated.

#### **4.11 Withdrawal periods**

Not applicable.

### **5. PHARMACOLOGICAL PROPERTIES**

Pharmacotherapeutic Group: Antibacterials for systemic use, first generation cephalosporins.  
ATCvet code: QJ01DB01.

#### **5.1 Pharmacodynamic properties**

The active ingredient of product is Cefalexin monohydrate.

Cefalexin is a bactericidal antibiotic of the cephalosporin family which acts by inhibiting the nucleopeptide synthesis of the bacterial wall. It is obtained by hemi-synthesis from the 7-amino cephalosporanic nucleus. Cephalosporins interfere with transpeptidation by acylating the enzyme making it unable to cross-link muramic acid-containing peptidoglycan strands. The inhibition of the biosynthesis of the material required to build the cell wall results in a defective cell wall which is consequently osmotically unstable. The combined action results in cell lysis and filament formation.

Cefalexin is active against a wide range of gram-positive and gram-negative aerobic bacteria: *Staphylococcus* spp. (including penicillin-resistant strains), *Streptococcus* spp., *Escherichia coli*, *Klebsiella* spp., *Salmonella* spp. and *Pasteurella multocida*. Cefalexin is not inactivated by  $\beta$ -lactamases produced by gram-positive bacteria and which usually affect penicillins.

Cefalexin had a time-dependent bactericidal activity on both tested bacteria species, *Staphylococcus felis* (gram-positive) and *Pasteurella multocida* (gram-negative).

In vitro activity of Cefalexin towards European strains isolated in 2003-2006 in cats exhibiting cutaneous or subcutaneous infections showed that the MIC<sub>90</sub> was 2  $\mu$ g/ml for *Staphylococcus* spp. and *Pasteurella* spp. and 0.5  $\mu$ g/ml for *Streptococcus* spp. These susceptible genera were also the bacteria the most-frequently isolated from wounds and abscesses in cats.

Resistance to Cefalexin may be due to one of the following mechanisms of resistance. Firstly, the production of various beta-lactamases (cephalosporinase), that inactivate the antibiotic, is the most prevalent mechanism among gram-negative bacteria. Secondly, a decreased affinity of the PBPs (penicillin-binding proteins) for  $\beta$ -lactam drugs is frequently involved for  $\beta$ -lactam resistant gram-positive bacteria. Lastly, efflux pumps, extruding the antibiotic from the bacterial cell, and structural changes in porins, reducing passive diffusion of the drug through the cell wall, may contribute to improve the resistant phenotype of a bacterium.

Well-known cross-resistance (involving the same resistance mechanism) exists between antibiotics belonging to the  $\beta$ -lactam group due to structural similarities. It occurs with  $\beta$ -lactamases enzymes, structural changes in porins or variations in efflux pumps. Co-resistance (different resistance mechanisms involved) has been described in *Escherichia.coli* due to a plasmid harbouring various resistance genes.

## 5.2 Pharmacokinetic particulars

### Dogs:

After single oral administration of the recommended dosage of 15 mg of Cefalexin per kg of bodyweight to Beagle dogs, plasma concentrations were observed within 30 minutes. The plasma peak was observed at 1.3 hour with a plasma concentration of 18.2  $\mu\text{g/ml}$ .

The bioavailability of the active was over 90 %. Cefalexin was detected until 24 hours after the administration. The first urine specimen was collected within 2 to 12 hours with peak concentrations of Cefalexin measured at 430 to 2758  $\mu\text{g/ml}$  within 12 hours.

After repeated oral administration of the same dosage, twice a day for 7 days, plasma peaks occurred 2 hours later with a concentration of 20  $\mu\text{g/ml}$ . Over the treatment period, concentrations were maintained above 1  $\mu\text{g/ml}$ . The mean elimination half-life is 2 hours. Skin levels were around 5.8 to 6.6  $\mu\text{g/g}$ , 2 hours after treatment.

### Cats:

A single oral administration of 15 mg of Cefalexin per kg of bodyweight in cats led to a bioavailability of 56 %. The plasma peak was observed at 1.55 hour following administration with a plasma concentration above 15.1  $\mu\text{g/ml}$ . The mean plasma half-life was about 1 to 2 hours. The first urine specimen was collected between 4 and 24 hours with the highest concentrations ranging between 63.7 and 393  $\mu\text{g/ml}$ , occurring within 24 hours.

With the same dosage administered over 7 days, twice a day, the highest urine concentration of Cefalexin reached between 518 and 1256  $\mu\text{g/ml}$ .

## 6. PHARMACEUTICAL PARTICULARS

### 6.1 List of excipients

Crospovidone,  
Mannitol  
Starch pregelatinised  
Croscarmellose sodium  
Colloidal anhydrous silica  
Colloidal hydrated silica  
Povidone K30  
Microcrystalline cellulose type A  
Poultry liver powder  
Magnesium stearate

Microcrystalline cellulose type B

## **6.2 Major incompatibilities**

Not applicable.

## **6.3 Shelf life**

Shelf-life of the veterinary medicinal product as packaged for sale: 15 months.

## **6.4 Special precaution for storage**

Keep the blisters in the outer carton.  
Divided tablets should be stored in blister packs.

## **6.5 Nature and composition of immediate packaging**

Blister packs consisting of cold formed OPA/Al/PVC foil and aluminium foil.

Cardboard Box with 30 blisters of 7 tablets.

## **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 products or waste materials derived from such veterinary medicinal product should be disposed of in accordance with local requirements.

## **7. MARKETING AUTHORISATION HOLDER**

Alfamed  
13ème rue - L.I.D  
Carros Cedex  
06517  
France

## **8. MARKETING AUTHORISATION NUMBER**

Vm 17902/4101

## **9. DATE OF FIRST AUTHORISATION**

15 January 2018

**10. DATE OF REVISION OF THE TEXT**

December 2022

Approved 21 December 2022

A handwritten signature in black ink, consisting of a stylized initial followed by the name "Hunter." with a period.