SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Duphatrim IS Injectable Solution
Trimethoprim 40 mg and Sulfadiazine 200 mg Solution for Injection.

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Active substances:

Each ml contains Trimethoprim 40 mg and Sulfadiazine 200 mg.

Excipient(s):

The product also contains Chlorocresol 1.0 mg/ml as antimicrobial preservative and Sodium Formaldehyde Sulphoxylate 1.0 mg/ml as antioxidant.

For a full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Solution for injection.
A sterile, clear yellow, aqueous solution for parenteral administration.

4. CLINICAL PARTICULARS

4.1 Target species

Horses
Cattle
Pigs
Dogs
Cats

4.2 Indications for use, specifying the target species

Duphatrim IS is indicated in the treatment of systemic infections caused by or associated with organisms sensitive to the Trimethoprim : Sulfadiazine combination. The in vitro spectrum of activity includes both Gram positive and Gram negative organisms including:

Actinobacilli
Actinomycae
Bordetella spp.
Brucella
Corynebacteria
Escherichia coli
Haemophilus spp.
Klebsiella spp.
Pasteurella spp.

Pneumococci
Proteus
Salmonella spp.
Staphylococci
Streptococci

Duphatrim IS is indicated for use in horses, cattle, pigs, dogs and cats for the treatment of acute, subacute and chronic bacterial infections sensitive to trimethoprim/sulfadiazine therapy such as: Bacterial infections of the respiratory tract, including rhinitis, pneumonia, bronchitis and in bacterial infections secondary to viral disease such as viral pneumonia or mycoplasma infections. Urogenital tract infections, including cystitis, vaginitis, urethritis, nephritis and metritis.
Alimentary tract infections, including neonatal diarrhoea and salmonellosis.
Other infections, such as foul-in-the-foot, severe mastitis, bacterial agalactia of sows, infections of the eye, ear or mouth.

4.3 Contraindications

Duphatrim IS should not be given by routes other than those recommended.
Not to be administered intraperitoneally.
Do not use in animals with known sulphonamide sensitivity, severe liver parenchymal damage or blood dyscrasias.

4.4 Special warnings <for each target species>

None known.

4.5 Special precautions for use

i. Special precautions for use in animals

Adequate drinking water should be available during the therapeutic effect of the product.

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

Care must be taken to avoid accidental self-injection.

Avoid direct contact with skin and eyes. In the event of accidental spillage, wash affected area with copious amounts of water. Seek medical advice if irritation persists.

Wash hands after use.

4.6 Adverse reactions (frequency and seriousness)

Anaphylactic shock has been observed on rare occasions following administration of potentiated sulphonamide preparations, mostly after intravenous injection. For intravenous administration the product should be warmed to body temperature and injected slowly over as long a period as is

reasonably practical. At the first sign of intolerance the injection should be interrupted and shock treatment initiated.

4.7 Use during pregnancy, lactation or lay

Duphatrim IS can be safely administered to pregnant and lactating animals.

4.8 Interaction with other medicinal products and other forms of interaction

Do not administer to horses exhibiting drug-induced cardiac arrhythmias. Such arrhythmias may be associated with the administration of certain anaesthetic and sedative agents.

4.9 Amounts to be administered and administration route

Cattle and Pigs:

The recommended dose rate is 15 mg of active ingredients per kilogram bodyweight (1 ml per 16 kg bodyweight) once by intramuscular or slow intravenous injection, but in severe infections it may be repeated daily until 2 days after symptoms resolve up to a maximum of 5 days.

Duphatrim IS may be administered by intravenous injection when rapid blood levels of trimethoprim and Sulfadiazine are required.

Horses:

The recommended dose rate is 15 mg of active ingredients per kilogram bodyweight (1ml per 16 kg bodyweight), by slow intravenous injection.

Dogs and Cats:

The recommended dose rate is 30 mg of active ingredients per kilogram bodyweight (1ml per 8 kg bodyweight), by subcutaneous injection only.

The recommended site in dogs is the loose skin at the top of the neck.

A single injection may be sufficient in uncomplicated conditions, but in severe infections it may be repeated daily for up to 5 days or until 2 days after the symptoms have resolved.

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

Not treatment specified.

4.11 Withdrawal period(s)

Milk for human consumption may only be taken from cattle after 48 hours from the last treatment.
Cattle may be slaughtered for human consumption only after 12 days from the last treatment.
Pigs may be slaughtered for human consumption only after 20 days from last treatment.

Not to be used in animals intended for human consumption.

The horse must have been declared as not intended for human consumption in accordance with the UK's Horse Passport Legislation.

5. PHARMACOLOGICAL PROPERTIES

Sulfadiazine (SDZ) inhibits the incorporation of para-aminobenzoic acid into folic acid and trimethoprim (TMP) inhibits the enzyme dihydrofolate reductase (DHFR) which converts dihydrofolic acid into tetrahydrofolic acid. TMP and SDZ act together synergistically with a double-blockade mode of action. The combination is bactericidal, inhibiting sequential steps in the synthesis of purines which are required for DNA synthesis. TMP/SDZ combinations have a broad bactericidal action against many gram-positive and gram-negative aerobic bacteria and a large proportion of anaerobic bacteria.

Sulfadiazine is moderately well absorbed after oral administration (rapidly pigs but more slowly by cattle), is protein bound only to a limited extent and is well distributed. Metabolism occurs in the liver and the major products are acetylated derivatives which are excreted mainly by glomerular filtration. The plasma half lives in cattle, pigs and dogs are 2 - 3 and 4 hours respectively. The half-life when given to horses in combination with Trimethoprim is 3 hours. Trimethoprim is a weak base with low water solubility. It is readily absorbed from the gastro-intestinal tract, although it is degraded in the rumen. Trimethoprim is about 65% protein bound but, being lipid soluble, readily penetrates cellular barriers to become widely distributed. It is partly oxidised and conjugated in the liver and the metabolites, plus unchanged Trimethoprim are excreted in the urine.

The degree of metabolism varies: 80% in the dog and almost 100% in the cow. The half-life is also variable: 4 hours in the horse, 2 hours in the pig and 1 hour in the cow.

Given the wide interspecies variability in the half-life of both actives, it is not possible to attain pharmacokinetic matching of the two compounds, but there is evidence that synergism occurs over a wide range of dose ratios. The combination of 1: 5 Trimethoprim: Sulfadiazine is well documented for veterinary use.

ATCVet Code: QJ01EW10

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Chlorocresol
Sodium formaldehyde sulphoxylate
Disodium edetate dihydrate
N-methyl pyrollidone
Sodium hydroxide
Water for Injections

6.2 Incompatibilities

None known.

6.3 Shelf life

Shelf-life of the veterinary medicinal product as packaged for sale: 2 years.
Following withdrawal of the first dose, use the product within 28 days.

6.4 Special precautions for storage

Do not store above 25ºC.
Protect from light.
Do not freeze.
Crystallisation of the product at low temperatures can be reversed by gentle warming.

6.5 Nature and composition of immediate packaging

Duphatrim IS is presented in 50 ml and 100 ml amber Type II glass vials sealed with nitryl rubber bungs.

Not all pack sizes may be marketed.

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

7. MARKETING AUTHORISATION HOLDER

Zoetis UK Limited
1st Floor, Birchwood Building
Springfield Drive
Leatherhead
Surrey
KT22 7LP

8. MARKETING AUTHORISATION NUMBER

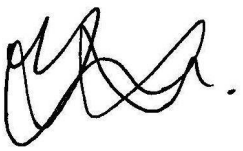
Vm 42058/4048

9. DATE OF FIRST AUTHORISATION

25 June 1992

10. DATE OF REVISION OF THE TEXT

August 2020



Approved: 26 August 2020