SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Trimacare 24% Solution for injection.

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Active Substance:
Each ml contains:

Trimethoprim	40mg/ml	(4%w/v)
Sulfadiazine	200mg/ml	(20%w/v)

Excipients:

Chlorocresol 1.0 mg/ml (0.1% w/v)
Sodium Formaldehyde Sulphoxylate dihydrate 1.0 mg/ml (0.1% w/v)

For a full list of excipients, see section 6.1

3. PHARMACEUTICAL FORM

Solution for injection.
A clear yellow soltuion.

4. CLINICAL PARTICULARS

4.1 Target species

Horses
Cattle
Pigs
Dogs
Cats

4.2 Indications for use, specifying the target species

Trimacare 24% is indicated in the treatment of systemic infections caused by or associated with organisms sensitive to the Trimethoprim: Sulfadiazine combination. The 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
Vibrio

4.3 Contra-indications

Trimacare 24% should not be given by routes other than those recommended. Not to be administered intraperitoneally.

Do not administer to 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

Special precautions for use in animals

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

Use of this product should be based on susceptability testing of the bacteria isolated from the animal. If this is not possible, therapy should be based on local (regional, farm level) epidemiologiacl information about susceptibility of the target bacteria.

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

Care must be taken to avoid accidental self-injection and contact with the skin. Wash hands after use.
Sulphonamides may cause hypersensitivity (allergy) following injection, inhalation, ingestion or skin contact. Hypersensitivity to sulphonamides may lead to cross reactions with other antibiotics. Allergic reactions to these substances may occasionally be serious.
1. Do not handle this product if you are sensitive to sulphonamides.
2. If you develop symptoms following exposure such as a skin rash, you should seek medical advice and show the doctor this warning.

4.6 Adverse reactions (frequency and seriousness)

Anaphylactic shock, potentially fatal, has been observed on rare occasions following administration of potentiated sulphonamide preparations, particularly by the intravenous route. Veterinary surgeons should be mindful of this possibility during the injection process. 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

No known contra-indications exist for the use of Trimacare 24% in 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

An appropriate graduated syringe must be used to allow accurate administration of the required volume. This is particularly important when injecting small volumes into small animals.

Cattle and Pigs:
The recommended dose rate is 15 mg of active ingredients per kilogram bodyweight (1 ml per 16 kg bodyweight) by intramuscular or slow intravenous injection.

Trimacare 24% 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 (1 ml 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 until 2 days after symptoms resolve, up to a maximum of 5 days.

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

No treatment specified.

4.11 Withdrawal period

Milk for human consumption must not be taken during treatment.
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 the last treatment.
Animals must not be slaughtered for human consumption during treatment.

Not to be used in horses intended for human consumption.
Treated horses may never be slaughtered for human consumption.
The horse must have been declared as not intended for human consumption under national horse passport legislation.

5. PHARMACOLOGICAL PROPERTIES

Pharmacotherapeutic group: Sulfadiazine & Trimethoprim

ATC Vet Code: QJ01EW10

5.1 Pharmacodynamic 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, a large proportion of anaerobic bacteria, chlamydia, and protozoa.

Sulfadiazine is moderately well absorbed after oral administration (rapidly by sheep and 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.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Chlorocresol,
Sodium Formaldehyde Sulphoxylate Dihydrate,
Disodium Edetate Dihydrate,
N-Methyl Pyrrolidone,
Sodium Hydroxide (for pH adjustment)
Water for injections.

6.2 Incompatibilities

None Known

6.3 Shelf life

Shelf life of the veterinary medicinal product as packaged: 2 years
Shelf life after first opening the immediate packaging: 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.
Following withdrawal of the first dose use the product within 28 days.
Discard unused material.

6.5 Nature and composition of immediate packaging

50 ml and 100 ml amber Type II glass vials sealed with nitryl rubber bungs, with aluminium overseals.
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

Norbrook Laboratories Limited
Station Works
Newry
Co. Down, BT35 6JP
Northern Ireland

8. MARKETING AUTHORISATION NUMBER(S)

Vm: 02000/4145

9. DATE OF FIRST AUTHORISATION

29th October 1997

10. DATE OF REVISION OF THE TEXT

October 2008