1 NAME OF THE VETERINARY MEDICINAL PRODUCT

Topimec Super Solution for Injection

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml contains:
Active substance(s):

Ivermectin	10	mg
Clorsulon	100	mg

Excipients:
For the full list of excipients, see section 6.1

3 PHARMACEUTICAL FORM

Solution for injection
A clear colourless to pale yellow coloured non-aqueous solution.

4 CLINICAL PARTICULARS

4.1 Target Species

Cattle.

4.2 Indications for use, specifying the target species

In beef and non-lactating dairy cattle:
For the treatment of mixed infestations of the following parasite species:
Gastrointestinal Roundworms (adult and fourth-stage larvae):
Ostertagia spp. (including inhibited O. ostertagi)
Haemonchus placei
Trichostrongylus axei
Trichostrongylus colubriformis
Cooperia spp.
Bunostomum phlebotomum
Oesophagostomum radiatum
Strongyloides papillosus (adult only)
Nematodirus helvetianus (adult only)
Nematodirus spathiger (adult only)
Toxocara vitulorum
Trichuris spp. (adult only)

Lungworm (adult and fourth-stage larvae):
Dictyocaulus viviparus

Liver Fluke (adult):
Fasciola hepatica

Eye Worms (adult):
Thelazia spp.

Warbles (parasitic stages):
Hypoderma bovis
H. lineatum

Mange mites:
Psoroptes bovis
Sarcoptes scabiei var. bovis

Sucking Lice:
Linognathus vituli
Haematopinus eursternus
Solenopotes capillatus

The veterinary medicinal product may also be used as an aid in the control of biting lice (*Damalinia bovis*) and the mange mite *Chorioptes bovis*, but complete elimination may not occur.

Persistent Activity
When cattle have to graze on pasture contaminated with infective larvae of cattle nematodes, treatment with the product at the recommended dose rate can control re-infection with *Haemonchus placei* and *Cooperia* spp., acquired up to 14 days after treatment, *Ostertagia ostertagi* and *Oesophagostomum radiatum* acquired up to 21 days after treatment and *Dictyocalus vivparus* acquired up to 28 days after treatment.

4.3 Contraindications

Do not use intramuscularly or intravenously. This product is registered for use in cattle only. Do not use in other species as severe adverse reactions, including fatalities in dogs, may occur (especially Collies, Old English Sheepdogs and related breeds and crosses). Do not use in animals with known hypersensitivity to the active substance or to any of the excipients.

4.4 Special warnings for each target species

Care should be taken to avoid the following practices because they increase the risk of development of resistance and could ultimately result in ineffective therapy:

- Too frequent and repeated use of anthelmintics from the same class, over an extended period of time
- Underdosing, which may be due to underestimation of bodyweight, misadministration of the product, or lack of calibration of the dosing device (if any).

Suspected clinical cases of resistance to anthelmintics should be further investigated using appropriate tests (e.g. Faecal Egg Count Reduction Test). Where the results of the test(s) strongly suggest resistance to a particular anthelmintic, an anthelmintic belonging to another pharmacological class and having a different mode of action should be used.

Resistance to Ivermectin has been reported in *Ostertagia ostertagi* and *Cooperia* species in cattle within the EU. Therefore, the use of this product should be based on local (regional, farm) epidemiological information about susceptibility of these helminth species and recommendations on how to limit further selection for resistance to anthelmintics.

4.5 Special precautions for use

Special precautions for use in animals

None

This product does not contain any antimicrobial preservative. Swab septum before removing each dose

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

Do not eat, drink or smoke while handling the product.

Wash hands after use.

Direct contact with the skin should be avoided. Take care to avoid self-administration; the product may cause local irritation and/or pain at the site of injection. In case of accidental self injection, seek medical advice and show the label to the physician.

In the event of accidental skin contact, wash the affected area immediately with soap and water. If accidental eye exposure occurs, flush the eyes immediately with water.

Other precautions

The product is very toxic to aquatic organisms and dung insects. Treated cattle should not have direct access to ponds, streams or ditches for 14 days after treatment. Long term effects on dung insects caused by continuous or repeated use cannot be excluded. Therefore repeated treatment of animals on a pasture with an ivermectin-containing product within a season should only be given in the absence of alternative treatments or approaches to maintain animal/flock health, as advised by a veterinarian

4.6 Adverse reactions (frequency and seriousness)

The frequency of adverse reactions is defined using the following convention:
- Very common (more than 1 in 10 animals displaying adverse reaction(s) during the course of one treatment).
- Common (more than 1 but less than 10 animals in 100 animals).
- Uncommon (more than 1 but less than 10 animals in 1,000 animals).
- Rare (more than 1 but less than 10 animals in 10,000 animals).
- Very rare (less than 1 animal in 10,000 animals, including isolated reports).

In very rare cases transitory discomfort has been observed in some cattle following subcutaneous administration. In very rare cases soft tissue swellings may occur at the site of injection. These reactions resolve over time without treatment.

4.7 Use during pregnancy, lactation or lay

The product can be administered to beef cows at any stage of pregnancy or lactation provided that the milk is not intended for human consumption. The product will not affect the fertility of cows and bulls and can be given to all ages of animals including young calves.

4.8 Interaction with other medicinal products and other forms of interaction

No interactions have been identified with other products.

4.9 Amounts to be administered and administration route

Dosage and duration of treatment

The product should be given at the recommended dosage level of 1 ml/50 kg bodyweight (based on a dosage level of 200 mcg ivermectin plus 2 mg clorsulon per kg bodyweight).

Method of administration
The product should be administered only be subcutaneous injection under the loose skin in front of, or behind, the shoulder. Divide doses greater than 10 ml between two injection sites.

A sterile 17 gauge ½-inch (15-20 mm) needle is recommended.
When using the 500 ml pack size use only automatic syringe equipment. For the 50 ml pack size, use of a multidose syringe is recommended.
When the temperature of the product is below 5ºC, difficulty in administration may be encountered due to increased viscosity. Warming the product and injection equipment to about 15ºC will greatly increase the ease with which the product can be injected. Different injection sites should be used for other parenteral products.

The timing of treatment should be based on epidemiological factors and should be customised for each individual farm. A dosing program should be established by a qualified professional person. To ensure a correct dosage, body weight should be determined as accurately as possible; accuracy of the dosing device should be checked. If animals are to be treated collectively rather than individually, to avoid under- or over-dosing, they should be grouped according to their bodyweight and dosed accordingly.

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

The administration of 5 ml per 50 kg bodyweight (5 x the recommended dose rate) resulted in injection site lesions (including swelling, sensitivity, oedema and inflammation).
No other drug-related adverse reactions are expected.

4.11 Withdrawal period(s)

Meat and offal: 66 days after the last treatment.
This product should not be used in dairy cows during lactation or in the dry period.
This product should not be used in pregnant dairy heifers.

5 PHARMACOLOGICAL or IMMUNOLOGICAL PROPERTIES

ATC Vet Code: QP54AA51
Pharmacotherapeutic Group: Endectocides, macrocyclic lactones, avermectins, ivermectin combinations

5.1 Pharmacodynamic properties

<u>Ivermectin</u>
Ivermectin is a member of the macrocyclic lactone class of endectocides which have a unique mode of action. Compounds of the class bind selectively and with high affinity to glutamate-gated chloride ion channels which occur in invertebrate nerve and muscle cells. This leads to an increase in the permeability of the cell membrane to chloride ions with hyperpolarization of the nerve or muscle cell, resulting in

paralysis and death of the parasite. Compounds of this class may also interact with other ligand-gated chloride channels, such as those gated by the neurotransmitter gamma-aminobutyric acid (GABA)
The margin of safety for compounds of this class is attributable to the fact that mammals do not have glutamate-gated chloride channels, the macrocyclic lactones have a low affinity for other mammalian ligand gated chloride channels and they do not readily cross the blood-brain barrier.

Clorsulon
Clorsulon is a sulfonamide. Clorsulonis rapidly absorbed into the circulating blood. Erythrocytes with bound drug as well as plasma are ingested by *Fasciola* spp. Adult *Fasciola* spp. are killed by clorsulon because of inhibition of enzymes in the glycolytic pathway, which is their primary source of energy.

5.2 Pharmacokinetic particulars

After subcutaneous administration of 2 mg clorsulon and 0.2 mg ivermectin per kg bodyweight, maximum plasma concentrations of ivermectin (Cmax: 65.80 ng/ml) were achieved 1-2 days after treatment and maximum plasma concentrations of clorsulon (Cmax: 2.58 µg/ml) were achieved approximately 8 hours after treatment.The terminal half life for the two active ingredients were determined as follows: Ivermectin approximately 3.79 days and Clorsulon approximately 3.58 days.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Glycerol Formal
Propylene Glycol Monoethanolamine (for pH adjustment)

6.2 Major incompatibilities

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

6.3 Shelf-life

Shelf-life of the veterinary medicinal product as packaged for sale: 3 years
Shelf-life after first opening the immediate packaging: 28 days

6.4 Special precautions for storage

Keep the container in the outer carton in order to protect from light.

6.5 Nature and composition of immediate packaging

Container material: High density polyethylene
Container closure: Siliconised grey bromobutyl rubber stopper
Container volume: 50, 250 or 500 ml

Not all pack sizes may be marketed

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

EXTREMELY DANGEROUS TO FISH AND AQUATIC LIFE
Do not contaminate surface water or ditches with product or used container. 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

Chanelle Pharmaceuticals Manufacturing Limited
Loughrea
Co. Galway
Ireland

8 MARKETING AUTHORISATION NUMBER(S)

VPA 10987/099/001

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 21st December 2010
Renewal of the last authorisation: 20th December 2015

10 DATE OF REVISION OF THE TEXT