ASSURING THE SAFETY, QUALITY AND EFFICACY OF VETERINARY MEDICINES

United Kingdom
Veterinary Medicines Directorate
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NATIONAL PROCEDURE

PUBLICLY AVAILABLE ASSESSMENT REPORT FOR A VETERINARY MEDICINAL PRODUCT

MoleEcto 12.5 mg/ml Pour-on for Sheep

Updated: May 2018

MODULE 1

PRODUCT SUMMARY

Name, strength and pharmaceutical form	MoleEcto Pour-on for Sheep
Applicant	Elanco Europe Ltd Lilly House Priestley Road Basingstoke Hampshire RG24 9NL
Active substance(s)	Cypermethrin tech. (cis: trans/ 80: 20)
ATC Vetcode	QP53AC08
Target species	Sheep
Indication for use	For the treatment and control of headflies. For the treatment of tick infestation with a persistent efficacy of 10 weeks (the majority of ticks will be killed within 3 hours) and treatment of biting lice in sheep. For the prevention and treatment of blowfly strike in sheep.

MODULE 2

The Summary of Product Characteristics (SPC) for this product is available on the Veterinary Medicines Directorate website (www.vmd.defra.gov.uk)

MODULE 3

PUBLIC ASSESSMENT REPORT

Legal basis of original application	Generic application in accordance with Article 13 (1) of Directive 2001/82/EC as amended.

I. SCIENTIFIC OVERVIEW

MoleEcto Pour-On for Sheep has been developed as a generic of Crovect 1.25% Pour-On Solution for Sheep and bioequivalence with this product is claimed. The product is administered topically to the fleece of sheep to treat tick and biting lice infestations, to control headflies and to prevent or treat blowfly strike.

The product is produced and controlled using validated methods and tests which ensure the consistency of the product released on the market. It has been shown that the product can be safely used in the target species; the slight reactions observed are indicated in the SPC[1].

The product is safe for the user, the consumer of foodstuffs from treated animals and for the environment, when used as recommended. Suitable warnings and precautions are indicated in the SPC. The efficacy of the product was demonstrated according to the claims made in the SPC. The overall benefit/risk analysis is in favour of granting a marketing authorisation.

II. QUALITY ASPECTS

A. Composition

The product contains cypermethrin tech. (cis: trans/ 80:20) as active substance and Lissamine Green B (E142) and 2-(2-Butoxyethoxy)ethanol as excipients.

The container/closure consists of 2.5 or 5 L of the product packaged into white, opaque high density polyethylene 'Kiwi' bottles sealed with a screw-fit cap. The product will also include a screw-fit spouted cap with an expanded steran sealing wad. The particulars of the containers and controls performed are provided and conform to the regulation. The choice of the formulation and absence of preservative are justified.

The product is an established pharmaceutical form and its development is adequately described in accordance with the relevant European guidelines.

[1] SPC – Summary of Product Characteristics

B. Method of Preparation of the Product

The product is manufactured fully in accordance with the principles of good manufacturing practice from a licensed manufacturing site. Manufacture of the product involves a simple solubilisation process. Process validation data on the product have been presented in accordance with the relevant European guidelines.

C. Control of Starting Materials

The active substance is cypermethrin, an established active substance not described in the European Pharmacopoeia (Ph. Eur). Data on the active substance were submitted in the form of an Active Substance Master File (ASMF). The active substance is manufactured in accordance with the principles of good manufacturing practice.

The active substance specification is considered adequate to control the quality of the material. Batch analytical data demonstrating compliance with this specification have been provided.

Neither excipient is described in a pharmacopoeia but both substances have been used in similar products for many years. Certificates of analysis were received from each manufacturer, and testing of the excipients is performed on receipt.

D. Specific Measures concerning the Prevention of the Transmission of Animal Spongiform Encephalopathies

There are no substances within the scope of the TSE Guideline present or used in the manufacture of this product.

E. Control on intermediate products

Not applicable.

F. Control Tests on the Finished Product

The finished product specification controls the relevant parameters for the pharmaceutical form. The tests in the specification, and their limits, have been justified and are considered appropriate to adequately control the quality of the product. The tests include identification of the active substance and excipients, density and appearance.

Satisfactory validation data for the analytical methods have been provided. Batch analytical data from the proposed production site have been provided demonstrating compliance with the specification.

G. Stability

Stability data on the active substance have been provided in accordance with applicable European guidelines, demonstrating the stability of the active substance when stored under the approved conditions.

Stability data on the finished product have been provided in accordance with applicable European guidelines, demonstrating the stability of the product throughout its shelf life when stored under the approved conditions. A retest period of 2 years was established for the active substance and a shelf life of 2 years is supported for the finished product.

H. Genetically Modified Organisms

Not applicable.

J. Other Information

- Shelf life of the product as packaged for sale: 2 years.
- Shelf life after first opening the immediate packaging: 3 months.
- Do not store above 25ºC.
- Protect from direct sunlight.
- Store in tightly closed original container.
- Store away from food, drink and animal feeding stuffs.

III. SAFETY AND RESIDUES ASSESSMENT (PHARMACO-TOXICOLOGICAL)

III.A Safety Testing

Pharmacological Studies

As this is a generic application submitted according to Article 13 (1) of Directive 2001/82/EC as amended, and bioequivalence with the reference product can be assumed because of the nature of the product, results of pharmacological studies are not required.

Toxicological Studies

As this is a generic application submitted according to Article 13 (1) of Directive 2001/82/EC as amended, and bioequivalence with the reference product can be assumed because of the nature of the product, results of toxicological studies are not required.

User Safety

The applicant has provided a user safety assessment in compliance with the relevant guideline. Warnings and precautions as listed on the product literature are adequate to ensure safety to users of the product:-

- This product is harmful if swallowed and may cause skin, eye or respiratory irritation. This product may also cause hypersensitivity reactions.
- Make sure when attaching a suitable Pour-on gun onto the container that the coiled retainer is secured onto the cap and the applicator.
- Wear eye protection, protective clothing, rubber gloves and boots when applying the product.
- Wear a disposable face-mask when applying as a fan-spray for the prevention of blowfly-strike.
- Wash splashes from skin and eyes immediately with plenty of clean water. If irritation persists seek medical advice immediately.
- Remove contaminated clothing immediately and wash exposed skin with plenty of clean water.
- Do not eat, drink or smoke whilst using the product.
- Wash hands and exposed skin before eating, drinking or smoking and after work.

Ecotoxicity

The applicant provided a first phase environmental risk assessment in compliance with the relevant guideline which showed that, although the PEC_{soil} was below 100µg/kg, further assessment was required as cypermethrin is a parasiticide and the product is for use in pasture animals. A second phase environmental risk assessment was provided.

The assessment concluded that the product is unlikely to pose a risk in soil, groundwater or surface water via leaching, and therefore is of minimal risk to human health. However the product does pose a risk to aquatic invertebrates and fish in surface water following direct exposure, indicated by a risk quotient greater than 1. In addition the PEC/ PNEC (risk quotient) for dung insects was calculated 6 days after treatment and remained as high as 1033. The following warnings are therefore required:-

- As a precautionary measure sheep must be kept away from watercourses for at least 12 hours following treatment.
- Long term effect on dung insects caused by continuous or repeated use of pyrethroid ectoparasiticides cannot be excluded. Therefore, repeated treatment of animals on the same pasture with a pyrethroid-containing product within a season should only be given in the absence of alternative treatments or approaches to maintain animal/ flock health.

Warnings and precautions as listed on the product literature are adequate to ensure safety to the environment when the product is used as directed. In addition to the above warning in Section 4.5 of the SPC, Section 5.3 Environmental Properties states:-

- Cypermethrin is moderately persistent and non-mobile in soil. It is extremely toxic to aquatic invertebrates. Cypermethrin is toxic to dung

insects. Long term effects on dung insects caused by continuous or repeated use of the product cannot be excluded.

III.B Residues documentation

Residue Studies

As this is a generic application submitted according to Article 13 (1) of Directive 2001/82/EC as amended and bioequivalence with the reference medicinal product, and whose bioequivalence with the reference medicinal product has been demonstrated by appropriate bioavailability studies.

Withdrawal Periods

Based on the data provided above, a withdrawal period of 8 days for meat in sheep is justified. The product is not authorised in animals producing milk for human consumption.

IV CLINICAL ASSESSMENT (EFFICACY)

As this is a generic application according to Article 13, and bioequivalence with a reference product has been demonstrated, efficacy studies are not required. The efficacy claims for this product are equivalent to those of the reference product.

IV.A Pre-Clinical Studies

Pharmacology

As this is a generic application submitted according to Article 13 (1) of Directive 2001/82/EC as amended and bioequivalence with the reference product can be assumed because of the nature of the product, results of pharmacological studies are not required.

Tolerance in the Target Species of Animals

As this is a generic application submitted according to Article 13 (1) of Directive 2001/82/EC as amended and bioequivalence with the reference product can be assumed because of the nature of the product, results of target species tolerance studies are not required.

IV.B Clinical Studies

As this is a generic application submitted according to Article 13 (1) of Directive 2001/82/EC as amended and bioequivalence with the reference product can be assumed because of the nature of the product, results of clinical studies are not required.

V OVERALL CONCLUSION AND BENEFIT– RISK ASSESSMENT

The data submitted in the dossier demonstrate that when the product is used in accordance with the Summary of Product Characteristics, the benefit/risk profile for the target species is favourable and the quality and safety of the product for humans and the environment is acceptable.

MODULE 4

POST-AUTHORISATION ASSESSMENTS

The SPC and package leaflet may be updated to include new information on the quality, safety and efficacy of the veterinary medicinal product. The current SPC is available on the Product Information Database of the Veterinary Medicines Directorate website.

(www.gov.uk/check-animal-medicine-licensed)

The post-authorisation assessment (PAA) contains information on significant changes which have been made after the original procedure which are important for the quality, safety or efficacy of the product.

The PAA for this product is available on the Product Information Database of the Veterinary Medicines Directorate website.

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