IPAR

Publicly Available Assessment Report for a
Veterinary Medicinal Product

Noromectin Premix 6 mg/g Premix for Medicated Feeding Stuff for Swine

PRODUCT SUMMARY

EU Procedure number	IE/V/0192/001/MR
Name, strength and pharmaceutical form	Noromectin Premix 0.6g/100 g Premix for medicated feedingstuff for Swine
Active substance(s)	Ivermectin
Applicant	Norbrook Laboratories (Ireland) Limited Rossmore Industial Estate Monaghan Ireland
Legal basis of application	Generic application in accordance with Article 13(1) of Directive 2001/82/EC as amended.
Date of completion of procedure	22nd November 2006
Target species	Pigs
Indication for use	Endectocide
ATCvet code	QP54AA01
Concerned Member States	BE, DE, ES, FI, IT, LU, NL

PUBLIC ASSESSMENT REPORT

The public assessment report reflects the scientific conclusion reached by the HPRA at the end of the evaluation process and provides a summary of the grounds for approval of the marketing authorisation for the specific veterinary medicinal product. It is made available by the HPRA for information to the public, after the deletion of commercially confidential information. The legal basis for its creation and availability is contained in Article 25.4 of EC Directive 2001/82/EC as amended by Directive 2004/28/EC for veterinary medicinal products. It is a concise document which highlights the main parts of the documentation submitted by the applicant and the scientific evaluation carried out by the HPRA leading to the approval of the product for marketing in Ireland.

The Summary of Product Characteristics (SPC) for this product is available on the HPRA's website.

I. SCIENTIFIC OVERVIEW

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 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.Qualitative and Quantitative Particulars

The product contains ivermectin Ph. Eur. 0.60 %w/w and the excipients butylhydroxyanisole, propyl Gallate, citric acid, propylene glycol and ground maize meal.
The product will be supplied in 1 kg and 5 kg 4-ply kraft paper bags, with high-density polyethylene liners sealed with a reinforced stitch.

The choice of the formulation is justified.

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

B.Method of Preparation of the Product

The product is manufactured fully in accordance with the principles of good manufacturing practice at a licensed manufacturing site.

Process validation data for the manufacturing process has been presented in accordance with the relevant European guidelines.

C.Control of Starting Materials

The active substance is ivermectin, an established active substance described in the European Pharmacopoeia. 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 has been provided.

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.

D.Control on Intermediate Products

Not applicable.

E.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.

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

F.Stability

Stability data on the active substance has 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 has been provided in accordance with applicable European guidelines, demonstrating the stability of the product throughout its shelf life when stored under the approved conditions.

The in-use shelf life in meal and pelleted feed is supported by appropriate stability data.

G.Other Information

Not applicable.

III SAFETY AND RESIDUES ASSESSMENT (PHARMACO-TOXICOLOGICAL)

III.ASafety Testing

Pharmacological Studies

The pharmacodynamic aspects of this product are identical to the reference product.

The applicant has conducted a pharmacokinetic study which shows that the product is bioequivalent to the authorised reference product Ivomec Premix for Pigs (Merial). Similar plasma concentrations were obtained with both products, and the degree of persistence was similar.Upper and lower confidence intervals were within the allowable ratio for Cmax and AUC.Deviation from the allowable 80 – 120% range for Tmax resulted from the wide variation in individual values, and is not considered significant.

Toxicological Studies

As this is a generic application according to Article 13, and bioequivalence with a reference product has been demonstrated, results of toxicological tests are not required.

User Safety

The applicant has provided a user safety assessment in compliance with the relevant guideline which shows no pharmacological or toxic effects are likely when the product is used in accordance with label recommendations. Warnings are similar to those of the reference product and are considered sufficient.

Environmental Risk Assessment

Warnings and precautions as listed on the product literature are identical to those of the reference product and are adequate to ensure safety to the environment when the product is used as directed.

III.BResidues Documentation

Residue Studies

A residue depletion study using the final formulation was conducted in pigs.Samples of tissues were taken from animals at several time points. Results show that residues depleted to below the MRL in all tissues before the end of the withdrawal period. The analytical method involved HPLC analysis with fluorescence detection and was fully validated.

MRLs

Ivermectin is listed in AnnexIof Council Regulation 2377/90.The marker substance is 22,23-Dihydroavermectin B1a.
MRLs are listed below (microgram/kg):

	PIGS
Muscle	-
Liver	100
Kidney	30
Fat/ skin	100
Milk	-

Withdrawal Periods

Based on the data provided above, a withdrawal period of 12 days for meat in pigs is justified.

IV. CLINICAL ASSESSMENT

IV.A Pre-Clinical Studies

Tolerance in the Target Species of Animals

The applicant has conducted a controlled target animal tolerance study using multiples of the recommended dose in the target species.. A placebo was used as a control. All doses were administered in feed for 8 days.
The following parameters were evaluated up to 14 days after the start of treatment: physical condition, bodyweight, haematology, blood urea, creatinine, AST, GGT.
No adverse effects were seen following doses up to 3 times the recommended dose.

Resistance

Adequate warnings and precautions appear on the product literature.

IV.B Clinical Studies

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.

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.

VI. 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 HPRA website.

This section 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.

Changes:
None.