IPAR

Publicly Available Assessment Report for a
Veterinary Medicinal Product

Huvexxin 25 mg/ml solution for injection for pigs

PRODUCT SUMMARY

EU Procedure number	IE/V/0662/001/DC
Name, strength and pharmaceutical form	Huvexxin 25 mg/ml solution for injection for pigs
Active substance(s)	Tulathromycin
Applicant	Huvepharma NV Uitbreidingstraat 80 2600 Antwerpen Belgium
Legal basis of application	Generic application in accordance with Article 13(1) of Directive 2001/82/EC as amended.
Date of completion of procedure	19th October 2022
Target species	Pigs
Indication for use	Treatment and metaphylaxis of swine respiratory disease (SRD) associated with *Actinobacillus pleuropneumoniae, Pasteurella multocida, Mycoplasma hyopneumoniae, Haemophilus parasuis* and *Bordetella bronchiseptica* susceptible to tulathromycin. The presence of the disease in the group must be established before the product is used. The veterinary medicinal product should only be used if pigs are expected to develop the disease within 2–3 days.
ATC vet code	QJ01FA94
Concerned Member States	AT, BE, BG, CY, CZ, DE, DK, EE, EL, ES, FR, HR, HU, IS, IT, LV, LU, LT, MT, NL, PL, PT, RO, SK, SI, UK(NI)

PUBLIC ASSESSMENT REPORT

The public assessment report reflects the scientific conclusion reached by the Health Products Regulatory Authority (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 slight reactions observed are indicated in the SPC.
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 tulathromycin as the active substance at 25 mg/ml and the excipients monothioglycerol, propylene glycol, citric acid, hydrochloric acid, sodium hydroxide and water for injections.
The container/closure system consists of Type I colourless glass vials with chlorobutyl rubber stoppers and aluminium caps.

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 tulathromycin, an established active substance. 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 (pharmaceuticals)
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 has been provided demonstrating compliance with the specification.

F. Stability
Stability data on the active substance tulathromycin 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.

G. Other Information
Not applicable.

III SAFETY AND RESIDUES ASSESSMENT (PHARMACO-TOXICOLOGICAL)

III.A Safety Testing
This generic application was submitted in accordance with paragraph 1 of Article 13 of Directive 2001/82/EC, as amended. The reference product cited by the applicant is Draxxin 25 mg/ml solution for injection for pigs (EU/2/03/041/006-008, Zoetis Belgium SA). The reference product has been authorised within the Community for not less than ten years based upon a full dossier and can therefore be accepted as a valid reference product.

Pharmacological Studies
As this is a generic application according to paragraph 1 of Article 13 of Directive 2001/82/EC, as amended, and bioequivalence with a reference product has been demonstrated, results of pharmacological tests are not required.
The applicant claimed an exemption from the requirement to provide *in vivo* bioequivalence studies in accordance with waiver 7.1b of the guideline on the conduct of bioequivalence studies for VMPs, which states; '*products intended for intramuscular, subcutaneous or systemically acting topical administration, bioequivalence studies are not required in cases when the product is of the same type of solution, contains the same concentration of the active substance and comparable excipients in similar amounts as the reference veterinary medicinal product, if it can be adequately justified that the difference(s) in the excipient(s) and/or their concentration have no influence on the rate and/or extent of absorption of the active substance.*'
Based on the argumentation and quality data provided by the applicant, the criteria of biowaiver 7.1b were fulfilled and bioequivalence was accepted.

Toxicological Studies
As this is a generic application according to paragraph 1 of Article 13 of Directive 2001/82/EC, as amended, 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 that the product does not present any greater risk to the user than that presented by the reference product.
Warnings and precautions as listed on the product literature are adequate to ensure safety to users of the product.

Environmental Risk Assessment

Phase I

The environmental risk assessment can stop in Phase I and no Phase II assessment is required because all predicted environmental concentrations in soil (PEC_{soil}) values fall below the trigger value of 100 µg/kg.

Conclusion

Based on the data provided, the ERA can stop at Phase I. The product is not expected to pose an unacceptable risk for the environment when used according to the SPC.

III.B Residues Documentation

Residue Studies

No residue depletion studies were conducted. The omission of injection site residue depletion studies was accepted on the grounds that bioequivalence with the reference product was supported, and the formulation of the candidate and reference products were demonstrated to be sufficiently similar to permit extrapolation of withdrawal periods from the reference to the candidate product.

MRLs

Tulathromycin is listed in Table I of the Annex to Commission Regulation (EU) No 37/2010 as follows:

	Pigs
Muscle	800 µg/kg
Liver	4000 µg/kg
Kidney	8000 µg/kg
Fat / skin	300 µg/kg

Withdrawal Periods

This generic application was submitted according to paragraph 1 of Article 13 of Directive 2001/82/EC, as amended. Based on the information provided above, the withdrawal period is the same as that for the reference product, as follows:
Meat and offal: 13 days.

IV. CLINICAL ASSESSMENT

IV.A Pre-Clinical Studies

As this is a generic application according to paragraph 1 of Article 13 of Directive 2001/82/EC, as amended, and bioequivalence with a reference product has been demonstrated, results of pre-clinical studies are not required.

Tolerance in the Target Species of Animals

As this is a generic application according to paragraph 1 of Article 13 of Directive 2001/82/EC, as amended, and bioequivalence with a reference product has been demonstrated, tolerance studies are not required.
The product literature accurately reflects the type and incidence of adverse effects which might be expected.

Resistance

As this is a generic application according to paragraph 1 of Article 13 of Directive 2001/82/EC, as amended, and bioequivalence with a reference product has been demonstrated, the resistance profile of the product will be the same as that of the reference product.
Adequate warnings and precautions appear on the product literature.

IV.B Clinical Studies

As this is a generic application according to paragraph 1 of Article 13 of Directive 2001/82/EC, as amended, and bioequivalence with a reference product has been demonstrated, efficacy studies are not required. The efficacy claims for this product are the same as 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.