Veterinary Medicines Directorate

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Veterinary Medicines Directorate
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NATIONAL PROCEDURE

PUBLICLY AVAILABLE ASSESSMENT REPORT FOR A VETERINARY MEDICINAL PRODUCT

Geepenil vet 300g Powder and Solvent for Solution for Injection

Date Created: November 2020

MODULE 1

PRODUCT SUMMARY

Name, strength and pharmaceutical form	Geepenil vet 300 g Powder and Solvent for Solution for Injection
Applicant	Orion Corporation Orionintie 1 02200 Espoo Finland
Active substance	Benzylpenicillin Sodium
ATC Vetcode	QJ01CE01
Target species	Horses
Indication for use	Infections caused by micro-organisms sensitive to benzylpenicillin in horse.

MODULE 2

The Summary of Product Characteristics (SPC) for this product is available on the Product Information Database of the Veterinary Medicines Directorate.

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

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.
Date of conclusion of the procedure	21st October 2020

I. SCIENTIFIC OVERVIEW

This was a generic application for Geepenil vet 300 g Powder and Solvent for Injection, submitted in accordance with Article 13 (1) of Directive 2001/82/EC, as amended. The reference product is Novocillin vet powder and solution for injection, authorised in December 1992. The product was subsequently withdrawn from the market as the manufacturer could not produce a product of a suitable quality. The applicant applied for an exemption from the demonstration of *in vivo* bioequivalence in accordance with 7.1.a) as stated in the Guideline on the conduct of bioequivalence studies for veterinary medicinal products (EMA/CVMP/016/00-Rev.2). This was granted.

Each ml of reconstituted product contains 300 mg benzylpenicillin sodium, and the product is indicated for Infections caused by micro-organisms sensitive to benzylpenicillin in the horse.

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, any reactions observed are indicated in the SPC.[1] The product is safe for the user and for the environment, when used as recommended. Suitable warnings and precautions are indicated in the SPC. The efficacy [2] 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.

[1] SPC – Summary of product Characteristics.
[2] Efficacy – The production of a desired or intended result.

II. QUALITATIVE AND QUANTITATIVE PARTICULARS OF THE CONSTITUENTS

II.A. Composition

The product is marketed as a crystalline powder which when reconstituted, contains 300 mg/ml benzylpenicillin sodium. The excipient is water for injections.

The container/closure system consists of Powder:
Colourless, glass vials (100 ml) (type II) glass vials closed with rubber stoppers (chlorobutyl) and aluminium seal and flip-off cap.

Solvent:
Colourless, glass vials (100 ml) (type I), closed with rubber stoppers (chlorobutyl) and aluminium seal and flip-off cap.

Polystyrene transfer needle

Pack sizes:
Cardboard box with 1 pair of vials (powder and solvent) and transfer needle
Cardboard box with 10 pairs of vials (powder and solvent) and transfer needles
Cardboard box with 40 (4 x 10) pairs of vials (powder and solvent) and transfer needles

The particulars of the containers and controls performed are provided and conform to the regulation. The choice of the formulation and the 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.

II.B. Description of the Manufacturing Method

The product is manufactured fully in accordance with the principles of good manufacturing practice from a licensed manufacturing site. The manufacturing method consists of simple filling and sterilising steps for both powder and solvent.

Process validation data on the product have been presented in accordance with the relevant European guidelines.

II.C. Control of Starting Materials

The active substance is benzylpenicillin sodium, 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 have been provided. An acceptable Certificate of Suitability and Certificate of Analysis for the solvent was received.

The Certificate of Suitability states that the retest period for benzylpenicillin sodium is 60 months if stored in sterile double polyethylene bags in a bag of quadruplex foil placed in a cardboard box.

II.C.4. Substances of Biological Origin

Scientific data complies with the Note for Guidance on Minimising the Risk of Transmitting Animal Spongiform Encephalopathy Agents via Human and Veterinary Medicinal Products (EMEA/410/01 Rev.3).

II.D. Control Tests Carried Out at Intermediate Stages of the Manufacturing Process

Not applicable.

II.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 have been provided. Batch analytical data from the proposed production site have been provided demonstrating compliance with the specification. Control tests on the finished product are those for: appearance, colour, uniformity of mass, pH, loss on drying, identification of active substance. For the reconstituted product: clarity of solution, presence of particles, assay of active substance, sterility and bacterial endotoxins.

II.F. 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.

G. Other Information

Shelf life of the veterinary medicinal product as packaged for sale: 3 years.
Shelf life after reconstitution according to directions: 24 hours (store in a refrigerator 2°C – 8°C).

Powder and Solvent: Store below 25°C in the outer carton. Protect from light.

Reconstituted product:
Store the reconstituted product in a refrigerator (2 – 8°C).

III. SAFETY AND RESIDUES DOCUMENTATION (PHARMACO-TOXICOLOGICAL)

III.A Safety Documentation

Pharmacological Studies

No pharmacological or toxicological data were required.

User Safety

A user risk assessment was provided 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. Therefore, the following applicant's user recommendations are appropriate:

- *Penicillins and cephalosporins may cause hypersensitivity (allergy) following injection, inhalation, ingestion or skin contact. Hypersensitivity to penicillins may lead to cross reactions to cephalosporins and vice versa. Allergic reactions to these substances may occasionally be serious.*
- *Avoid skin contact with this product if you know you are sensitised, or if you have been advised not to work with such preparations.*
- *Handle this product with great care to avoid exposure.*
- *If you develop symptoms following exposure, such as a skin rash, you should seek medical advice and show the package leaflet or the label to the physician. Swelling of the face, lips or eyes or difficulty in breathing are more serious symptoms and require urgent medical attention.*
- *This product may cause eye irritation.*
- *Avoid contact with the eyes.*
- *In the event of accidental eye contact, rinse the affected eye(s) with plenty of clean water.*
- *Wash hands after use.*

Environmental Safety

Phase I

The Environmental Risk Assessment (ERA) was carried out in accordance with VICH and CVMP guidelines. The assessment ends in Phase I at Question 5 of the VICH decision tree ('Will the VMP be used to treat a small number of animals in a flock or herd?'). The product is expected to pose an acceptable risk for the environment when used as recommended.

III.B.2 Residues documentation

Residue Studies

Due to the legal base of the application, no residue depletion study data have been submitted. This approach is considered acceptable since bioequivalence with the reference product can be accepted.

Withdrawal Periods

Not authorised for use in horses intended for human consumption.

IV. CLINICAL DOCUMENTATION

The applicant has specified an exemption under 7.1.a) of the current CVMP 'Guideline on the conduct of bioequivalence studies for veterinary medicinal products (EMA/CVMP/016/00-Rev.2)' which states:

"The product is to be administered solely as an aqueous intravenous solution containing the same active substance as the currently approved product. However, if any excipients interact with the active substance (e.g. complex formation), or otherwise affect the disposition of the active substance, a bioequivalence study is required unless both products contain the same excipients in very similar quantity and it can be adequately demonstrated that any difference in quantity does not affect the pharmacokinetics of the active substance'.

Considering the data presented, the test formulation, when administered, can be considered the same as the reference formulation and therefore bioequivalence with the reference formulation can be assumed.

Tolerance in the Target Species

Tolerance studies were not required due to the nature of the application.

Resistance

Resistance studies were not required due to the nature of the application. Adequate warnings and precautions appear on the product literature.

IV.II. Clinical Documentation

Clinical studies were not required due to the nature of the application.

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 of the product is favourable.

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.

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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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