



**Veterinary  
Medicines  
Directorate**

**United Kingdom  
Veterinary Medicines Directorate  
Woodham Lane  
New Haw  
Addlestone  
Surrey KT15 3LS**

**NATIONAL PROCEDURE**

**PUBLICLY AVAILABLE ASSESSMENT REPORT FOR A VETERINARY  
MEDICINAL PRODUCT**

**Fluboral 200 mg/ml Suspension for Use in Drinking Water for Pigs and  
Chickens**

**Date Created: June 2023**

## MODULE 1

### PRODUCT SUMMARY

|  |  |
|--|--|
| Name, strength and pharmaceutical form | Fluboral 200 mg/ml Suspension for Use in Drinking Water for Pigs and Chickens  |
| Applicant                              | Dechra Limited<br>Snaygill Industrial Estate<br>Keighley Road<br>Skipton<br>North Yorkshire<br>BD23 2RW<br>United Kingdom  |
| Active substance                       | Flubendazole   |
| ATC Vetcode                            | QP52AC12   |
| Target species                         | Pigs and Chickens  |
| Indication for use                     | <p>Pigs:<br/>Treatment of helminthiasis caused by <i>Ascaris suum</i> (adult and L4 intestinal stages)</p> <p>Chickens:<br/>Treatment of helminthiasis caused by:</p> <ul style="list-style-type: none"><li>• <i>Ascaridia galli</i> (adult stages)</li><li>• <i>Heterakis gallinarum</i> (adult stages)</li><li>• <i>Capillaria</i> spp. (adult stages)</li></ul> |

## **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](http://www.gov.uk/check-animal-medicine-licensed)

## MODULE 3

### PUBLIC ASSESSMENT REPORT

|                                     |   |
|-------------------------------------|---|
| Legal basis of original application | Generic hybrid application in accordance with Article 13(3) of Directive 2001/82/EC as amended. |
| Date of conclusion of the procedure | 19/04/2023  |

#### I. SCIENTIFIC OVERVIEW

This was determined a generic 'hybrid' application because changes to the strength and pharmaceutical form/route of administration with regard to the reference medicinal product have been made.

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.<sup>1</sup> 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<sup>2</sup> 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. QUALITATIVE AND QUANTITATIVE PARTICULARS OF THE CONSTITUENTS

##### **II.A. Composition**

The product contains flubendazole and the excipients methyl parahydroxybenzate, propyl parahydroxybenzoate, propylene glycol, poloxamer 407, sodium chloride, simethicone emulsion and purified water.

The container/closure system consists of HDPE containers with either HDPE or PP closure with a LDPE seal. The particulars of the containers and controls performed are provided and conform to the regulation.

The choice of the formulation and the presence of preservative are justified.

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

<sup>1</sup> SPC – Summary of product Characteristics.

<sup>2</sup> Efficacy – The production of a desired or intended result.

## ***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 stirring and milling.

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 flubendazole, 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.

Excipients comply with either Ph. Eur. or USP monographs.

### ***II.C.4. Substances of Biological Origin***

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

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

The tests performed during production are described and the results of 3 consecutive runs, conforming to the specifications, are provided.

## ***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.

## ***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 first opening the immediate packaging: 6 months.

Shelf life after dilution according to directions: 24 hours

Store below 30 °C

## **III. SAFETY AND RESIDUES DOCUMENTATION (PHARMACO-TOXICOLOGICAL)**

### ***III.A Safety Documentation***

#### ***Pharmacological Studies***

Not required due to the legal basis of the application.

#### ***Toxicological Studies***

Not 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:

- The veterinary medicinal product can cause skin and eye irritation, and hypersensitivity reactions.
- Direct contact with the product should be avoided. People with known hypersensitivity to flubendazole should avoid contact with the veterinary medicinal product.
- Personal protective equipment consisting of gloves should be worn when handling the veterinary medicinal product.
- Wash hands after use.
- In the event of eye contact, rinse thoroughly with water and if conjunctival redness persists, seek medical advice.

#### ***Environmental Safety***

The Environmental Risk Assessment (ERA) was carried out in accordance with VICH and CVMP guidelines.

## **Phase I:**

The initial predicted environmental concentration (PEC) in soil is less than 100 µg/kg. A Phase II ERA was not required.

### ***III.B.2 Residues documentation***

#### ***Residue Studies***

The applicant has provided two residue depletion studies to address pig meat and offal, one for each dose specified on the SPC, and two residue depletion studies in chickens, one that addresses meat and offal and the other for eggs. In addition, validation of the analytical methods used in each study were provided. Overall, the studies adhered to the relevant VICH guidelines and the methods for determination of the marker residues in all matrices were acceptable.

#### ***Withdrawal Periods***

Based on the data provided, the following withdrawal periods are justified:

Pigs:

Meat and offal:

1mg/kg for 5 days: 4 days

2.5mg/kg for 2 days: 5 days

Chickens:

Meat and offal: 2 days

Eggs: zero days

## **IV. CLINICAL DOCUMENTATION**

### ***IV.I. Pre-Clinical Studies***

#### ***Pharmacology***

Not required.

#### ***Tolerance in the Target Species***

Bibliographical data have been provided which show that flubendazole is well-tolerated in the target animal species pigs and chickens when administered at the recommended treatment dose. This conclusion is supported by observations made during the residue and dose confirmation studies conducted with the product. The product literature accurately reflects the type and incidence of adverse effects which might be expected.

#### ***IV.II. Clinical Documentation***

##### ***Laboratory Trials***

Bioequivalence cannot be demonstrated due to the low availability of the active substance, so the applicant conducted dose confirmation studies.

##### ***Dose confirmation studies:***

The applicant performed four dose confirmation studies in pigs and six studies in chickens.

#### **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.

[\(www.gov.uk/check-animal-medicine-licensed\)](http://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.

[\(www.gov.uk/check-animal-medicine-licensed\)](http://www.gov.uk/check-animal-medicine-licensed)