



# **Irish Medicines Board**

**(Reference Member State)**

**DECENTRALISED PROCEDURE**

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

**Flubendazole Elanco 50 mg/g oral powder for pigs**

## MODULE 1

### PRODUCT SUMMARY

EU Procedure number	IE/V/0292/001/DC
Name, strength and pharmaceutical form	Flubendazole Elanco 50 mg/g oral powder for pigs
Applicant	Eli Lilly and Company Ltd. Lilly House, Priestley Road, Basingstoke, Hampshire, UK
Active substance	Flubendazole
ATCvet code	QP52AC12
Target species	Pigs
Indication for use	Treatment of helminthiasis due to mature and immature stages of the following nematodes of the gastro-intestinal tract:  <i>Ascaris suum</i> , (large roundworm), <i>Hyostromylus rubidus</i> , (red stomach worm), <i>Oesophagostomum dentatum</i> (nodular worm), <i>Trichuris suis</i> (whipworm), <i>Strongyloides ransomi</i> (threadworm) (adult).  Flubendazole is ovicidal

## **MODULE 2**

The Summary of Product Characteristics (SPC) for this product is available on the veterinary Heads of Agencies website ([www.hma.eu](http://www.hma.eu)).

## **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 completion of the original decentralised procedure	21/12/2012
Concerned Member States for original procedure	FR, PL

#### **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 risk/benefit analysis is in favour of granting a marketing authorisation.

#### **II. QUALITY ASPECTS**

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

The product contains flubendazole 50mg/g and the excipients titanium dioxide (E171), sodium laurilsulfate and lactose monohydrate. The product (600 g) is presented in a polypropylene container with a low density polyethylene (LDPE) snap-on closure.

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

**C. Control of Starting Materials**

The active substance is flubendazole, an established 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.

**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.

Satisfactory validation data for the analytical methods have been provided.

Batch analytical data from the proposed production sites have been provided demonstrating compliance with the specification.

**G. 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 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.

#### ***H. Genetically Modified Organisms***

Not applicable

#### ***J. Other Information***

None.

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

#### ***III.A Safety Testing***

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

The application is made in accordance with Article 13(1) of Directive 2001/82/EC, as amended (a generic application). It was confirmed that the formulation and manufacturing process for the product is identical to that of the reference product. As a result it was accepted that the product was bioequivalent to the reference product, Flubenol 5% w/w oral powder for pigs (VPA 10545/034/001).

As this is a generic application according to Article 13(1), and bioequivalence with a reference product has been accepted, results of pharmacological tests are not required.

The pharmacological aspects of this product reflect those of the reference product.

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

As this is a generic application according to Article 13(1), and bioequivalence with a reference product has been accepted, results of toxicological tests are not provided.

### **User Safety**

It was accepted that the product will not pose any greater risk to the user than the risks associated with use of the reference product Flubenol 5% w/w oral powder for pigs.

Warnings and precautions as listed on the product literature are adequate to ensure safety to users of the product.

### **Ecotoxicity**

The applicant provided a first phase environmental risk assessment in compliance with the relevant guideline which showed that no further assessment was required. No warnings are therefore required.

Precautions as listed on the product literature are adequate to ensure safety to the environment when the product is used as directed.

## **III.B Residues documentation**

### **Residue Studies**

The product that is the subject of the present application is identical in every respect (composition, manufacturing process) to the reference product. On this basis it was assumed that depletion of residues from target tissues will be identical. Consequently, exemption from the requirement to present confirmatory residue data was justified and the authorised withdrawal period for the reference product can be applied to the generic product.

### **MRLs**

Flubendazole is listed in Table 1 of the Annex of Commission Regulation (EU) No. 37/2010 (O.J. 20.1.2010, L15/33). The marker substance is Sum of flubendazole and (2-amino 1H-benzimidazol-5-yl) (4fluorophenyl) methanone.

MRLs are listed below:

	Porcine
Muscle	50 µg/kg
Liver	400 µg/kg
Kidney	300 µg/kg
Fat / skin	50 µg/kg

### **Withdrawal Periods**

Based on the data provided above, a withdrawal period of 7 days for meat in pigs is justified.

#### **IV. CLINICAL ASSESSMENT (EFFICACY)**

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

###### ***Tolerance in the Target Species of Animals***

The product literature accurately reflects the type and incidence of adverse effects which might be expected.

###### ***Resistance***

Adequate warnings and precautions appear on the product literature.

##### ***IV.B Clinical Studies***

As this is a generic application according to Article 13(1), and bioequivalence with a reference product has been accepted, 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 risk benefit 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 veterinary Heads of Agencies website ([www.hma.eu](http://www.hma.eu)).

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.

None.