



**Veterinary  
Medicines  
Directorate**

**United Kingdom  
Veterinary Medicines Directorate  
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**NATIONAL PROCEDURE**

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

**Joi Multiwormer 50/144/150 mg Tablets for Dogs  
Krka Multiwormer 50/144/150 mg Tablets for Dogs**

**Date Created: September 2021**

## MODULE 1

### PRODUCT SUMMARY

Name, strength and pharmaceutical form	Joi Multiwormer 50/144/150 mg Tablets for Dogs Krka Multiwormer 50/144/150 mg Tablets for Dogs
Applicant	KRKA, d.d., Novo mesto Šmarješka cesta 6 8501 Novo mesto Slovenia
Active substance	Pyrantel embonate, praziquantel, febantel
ATC Vetcode	QP52AC55
Target species	Dogs
Indication for use	For the treatment of mixed infestations with the following roundworms and tapeworms in adult dogs and puppies: Nematodes Ascarids: <i>Toxocara canis</i> , <i>Toxascaris leonina</i> (late immature forms and mature forms) Hookworms: <i>Uncinaria stenocephala</i> , <i>Ancylostoma caninum</i> (adults) Cestodes Tapeworms: <i>Taenia</i> spp., <i>Dipylidium caninum</i> .

## **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 application in accordance with Article 13(1) of Directive 2001/82/EC as amended.
Date of conclusion of the procedure	July 2021

## I. SCIENTIFIC OVERVIEW

These applications were submitted in accordance with Article 13(1) of Directive 2001/82/EC as amended. The reference product was Drontal Plus Flavour Tablets for Dogs, first authorised in Germany in 1993. The products are indicated for use in dogs, for the treatment of mixed infestations with the following roundworms and tapeworms in adult dogs and puppies: nematodes: ascarids: *Toxocara canis*, *Toxascaris leonina* (late immature forms and mature forms), hookworms: *Uncinaria stenocephala*, *Ancylostoma caninum* (adults), and cestodes: tapeworms: *Taenia* spp, *Diplydium caninum*. The dose rate is 15 mg/kg body weight febantel, 14.4 mg/kg pyrantel and 5 mg/kg praziquantel. This is equivalent to 1 tablet per 10 kg body weight. Tablets may be halved/quartered to allow accuracy of dosing.

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, 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 products contain 50 mg praziquantel, 144 mg pyrantel embonate and 150 mg febantel per tablet. The excipients are lactose monohydrate, maize starch,

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

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

povidone K-30, sodium lauryl sulphate, microcrystalline cellulose, silica colloidal anhydrous, magnesium stearate and meat flavour.

The container/closure system consists of an OPA/Al/PVC-Al blister in a cardboard box, which contains 2 or 4 tablets. 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 a wet granulation of the ingredients.

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

### ***II.C. Control of Starting Materials***

The active substances are pyrantel embonate febantel and praziquantel, established active substances described in the European Pharmacopoeia. The active substances are manufactured in accordance with the principles of good manufacturing practice.

The active substance specifications are considered adequate to control the quality of the material. Batch analytical data demonstrating compliance with specifications have been provided. Acceptable certificates of suitability were provided. Excipients and packaging are suitably controlled with regard to quality.

#### ***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***

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 sites have been provided demonstrating compliance with the specification. Control tests on the finished product are those for: appearance, uniformity of dose and mass, identification, content of active substances and related substances, dissolution of active substances and microbiological quality.

### ***II.F. Stability***

Stability data on the active substances have been provided in accordance with applicable European guidelines, demonstrating the stability of the active substance when stored under the approved conditions.

### ***G. Other Information***

Shelf life of the veterinary medicinal product as packaged for sale: 3 years. Any part-used tablets should be discarded. This medicinal product does not require any special storage conditions.

## **III. SAFETY AND RESIDUES DOCUMENTATION (PHARMACOTOXICOLOGICAL)**

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

Due to the nature of the applications, no additional toxicological and pharmacological 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 user recommendations are appropriate:

In the interests of good hygiene, persons administering the tablet directly to a dog or by adding it to the dog's food, should wash their hands afterwards. In case of accidental ingestion, seek medical advice and show the package leaflet to the physician.

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

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

#### **Phase I:**

The product will only be used in non-food animals and as a result environmental exposure will be low. A Phase II ERA was not required.

## **IV. CLINICAL DOCUMENTATION**

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

#### ***Pharmacology***

No pharmacodynamic data have been submitted. The proposed product contains the same active substances as the reference product and so its pharmacodynamic properties have already been established. No pharmacokinetic data have been submitted. Both the proposed and reference products are for use in the same target species, presented in the same pharmaceutical form for oral administration, quantitatively the same in terms of active substance, and qualitatively the same in terms of excipients.

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

Tolerance studies were not required because the proposed products were shown to be essentially similar to the reference product. Sufficient tolerance data were collected in the various dose confirmation studies. Suitable references were provided.

#### ***Resistance***

Adequate warnings and precautions appear on the product literature.

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

The applicant has conducted four GCP dose confirmation studies. The studies were generally conducted well, and in accordance with current guidance. Results indicate sufficient efficacy against the target parasites.

## **V OVERALL CONCLUSION AND BENEFIT– RISK ASSESSMENT**

The data submitted in the dossier demonstrate that when the products are used in accordance with the Summary of Product Characteristics the benefit/risk profile of the products 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))