Veterinary Medicines Directorate

United Kingdom
Veterinary Medicines Directorate
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NATIONAL PROCEDURE

PUBLICLY AVAILABLE ASSESSMENT REPORT FOR A VETERINARY MEDICINAL PRODUCT

Ruboxim 5 mg Chewable Tablets for Dogs
Ruboxim 10 mg Chewable Tablets for Dogs
Ruboxim 20 mg Chewable Tablets for Dogs
Ruboxim 40 mg Chewable Tablets for Dogs

Date Created: February 2025

MODULE 1

PRODUCT SUMMARY

Name, strength and pharmaceutical form	Ruboxim 5 mg Chewable Tablets for Dogs, Chewable tablets Ruboxim 10 mg Chewable Tablets for Dogs, Chewable tablets Ruboxim 20 mg Chewable Tablets for Dogs, Chewable tablets Ruboxim 40 mg Chewable Tablets for Dogs, Chewable tablets
Applicant	KRKA, d.d., Novo mesto, Smarjeska cesta 6, 8501 Novo mesto, Slovenia
Active substance	Robenacoxib
ATC Vetcode	QM01AH91
Target species	Dogs
Indication for use	For the treatment of pain and inflammation associated with chronic osteoarthritis. For the treatment of pain and inflammation associated with soft tissue surgery.

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 8 of VMRs 2013 (Schedule 1, Para 10) as amended.
Date of conclusion of the procedure	6/2/2025 for Ruboxim 5 mg Chewable Tablets for Dogs & Ruboxim 10 mg Chewable Tablets for Dogs 7/2/2025 for Ruboxim 20 mg Chewable Tablets for Dogs & Ruboxim 40 mg Chewable Tablets for Dogs

I. SCIENTIFIC OVERVIEW

These are generic applications with the reference products being Onsior Tablets for Dogs in corresponding strengths. The reference products have been authorised in the UK since 2008. Bioequivalence has been established with regards to the reference products.

Ruboxim tablets are flavoured tablets and contain either 5 mg, 10 mg, 20 mg or 40 mg of robenacoxib. The product is indicated for the treatment of pain and inflammation associated with chronic osteoarthritis or soft tissue surgery. For osteoarthritis the recommended dose is 1 mg/kg body weight, with a range 1–2 mg/kg, given once daily at the same time every day. For soft tissue surgery the recommended dose is 2 mg/kg body weight, with a range of 2-4 mg/kg, given as a single oral treatment prior to soft tissue surgery. After surgery, once daily treatment may be continued for up to two further days.

The distribution category in GB and NI is POM-V, a veterinary medicinal product subject to prescription.

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 contains robenacoxib and the excipients microcrystalline cellulose, povidone, crospovidone, yeast powder, meat flavour, colloidal anhydrous silica and magnesium stearate.

The container/closure system consists of OPA-Al-PVC/aluminium blisters. 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 regulatory 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.

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

II.C. Control of Starting Materials

The active substance is robenacoxib, an established active substance supplied in accordance with an ASMF (Active Substance Master File). 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.

All excipients are well known pharmaceutical ingredients and their quality is compliant with regulatory standards, except meat flavour and yeast powder, for which scientific data were provided and considered acceptable.

For the packaging, the compliance statements and the certificate of analysis are satisfactory.

II.C.4. Substances of Biological Origin

Scientific data and/or certificates of suitability issued by the EDQM have been provided and compliance with the Note for Guidance on Minimising the Risk of

Transmitting Animal Spongiform Encephalopathy Agents via Human and Veterinary Medicinal Products has been satisfactorily demonstrated.

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.

II.F. Stability

Stability data on the active substance have been provided in accordance with applicable regulatory 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 regulatory 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 is 2 years. Do not store above 30 °C and store in the original package in order to protect from moisture.

III. SAFETY AND RESIDUES DOCUMENTATION (PHARMACO-TOXICOLOGICAL)

Due to the legal basis of the applications, no new pharmacological or toxicological studies have been submitted. Evidence is based on bibliographic data obtained on the reference product.

Warnings and precautions as listed on the product literature are the same as those of the reference product and are adequate to ensure safety of the product to users / the environment / consumers.

III.A Safety Documentation

Pharmacological Studies

Due to the legal basis of the applications, no new pharmacological studies have been submitted. The product has the same qualitative and quantitative composition of the active substance and excipients as the reference product, and they are of the same pharmaceutical form with demonstrated bioequivalence.

Bibliographical data has been provided which show that robenacoxib is a non-steroidal anti-inflammatory drug (NSAID) of the coxib class. It is a potent and selective inhibitor of the cyclooxygenase 2 enzyme (COX-2) and Robenacoxib tablets are COX-1 sparing at recommended doses in dogs. Robenacoxib had analgesic and anti-inflammatory actions in an inflammation model in dogs with single oral doses ranging from 0.5 to 8 mg/kg, with an ID_{50} of 0.8 mg/kg and a rapid onset of action (0.5 h).

The applicant has also provided bibliographical data which show that after oral administration of robenacoxib flavoured tablets at 1-2 mg/kg without food, peak blood concentrations are attained rapidly with a T_{max} of 0.75 h, a C_{max} of 2180 ng/ml and an AUC of 2007 ng·h/ml. Co-administration of robenacoxib non-flavoured tablets with food produced no delay in T_{max}, but slightly lower values for C_{max} and AUC. The systemic bioavailability of robenacoxib tablets in dogs was 62% with food and 84% without food. Robenacoxib has a relatively small volume of distribution (Vss 240 ml/kg) and is highly bound to plasma proteins (>99%). Robenacoxib is extensively metabolised by the liver in dogs. Robenacoxib is cleared rapidly from blood (CL 0.81 L/kg/h) with an elimination $t_{1/2}$ of 0.7 h after intravenous administration. After oral administration of the tablets, the terminal half-life in blood was 0.91 h. Robenacoxib persists longer and at higher concentrations at sites of inflammation than in blood. Robenacoxib is excreted predominantly via the biliary route (~65%) and the remainder via the kidneys. Repeated oral administration of robenacoxib to dogs at dosages of 2-10 mg/kg for 6 months produced no change in the blood profile, with neither accumulation of robenacoxib nor enzyme induction. Accumulation of metabolites has not been tested. The pharmacokinetics of robenacoxib do not differ between male and female dogs, and are linear over the range 0.5-8 mg/kg.

Toxicological Studies

Due to the legal basis of the applications, no new toxicological studies have been submitted. The product has the same qualitative and quantitative composition of the active substance and excipients as the reference product, and they are of the same pharmaceutical form with demonstrated bioequivalence. Therefore, the same risks will apply.

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:

- For pregnant women, particularly near-term pregnant women, prolonged dermal exposure increases the risk of premature closure of the ductus arteriosus in the foetus. Pregnant women should wear gloves to avoid accidental exposure.
- Accidental ingestion increases the risk for NSAID adverse effects, particularly in small children. Care should be taken to avoid accidental ingestion by children. In order to prevent children from accessing the product, do not remove tablets from the blister until ready to administer to the animal. Tablets should be administered and stored (in the original packaging) out of sight and reach of children.
- In case of accidental ingestion, seek medical advice immediately and show the package leaflet or the label to the physician.
- Wash hands after use of the veterinary medicinal product.

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 Studies

As these applications are for generic products and the applicant has demonstrated bioequivalence between the test and reference products, no new pre-clinical data is provided.

IV.II. Clinical Documentation

As these applications are for generic products and the applicant has demonstrated bioequivalence between the test and reference products, no new clinical data is provided.

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 Characteristic 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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