



**College ter Beoordeling van Geneesmiddelen / Medicines Evaluation Board**

**Graadt van Roggenweg 500  
3531 AH Utrecht  
The Netherlands**

**DECENTRALISED PROCEDURE**

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

**Carprosol 50 mg/ml solution for injection for dogs and cats**

**January 2019**

Carprosol 50 mg/ml solution for injection for dogs and cats	NL/V/0174/001/DC
CP-Pharma Handelsgesellschaft mbH	DCP
	Publicly available assessment report

## MODULE 1

### PRODUCT SUMMARY

Dutch Registration number	REG NL 112213
EU Procedure number	NL/V/0174/001/DC
Name, strength and pharmaceutical form	Carprosol 50 mg/ml solution for injection for dogs and cats
Applicant	CP-Pharma Handelsgesellschaft mbH Ostlandring 13 31303 Burgdorf Germany
Active substance(s)	Carprofen
ATC Vetcode	QM01AE91
Target species	Dogs and cats.
Indication for use	Dog: For the control of post-operative pain and inflammation following orthopaedic and soft tissue (including intra-ocular) surgery. Cat: For the control of post-operative pain following surgery.

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## **MODULE 2**

The Summary of Product Characteristics (SPC) for this product is available on the website: <http://mri.medagencies.org/veterinary/>.

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## 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	29 May 2013.
Concerned Member States for original procedure	AT, BE, CZ, DE, DK, ES, FR, HU, IE, IT, PL, UK.  (Withdrawn in AT, BE, CZ, DK, ES, IE, IT, PL, UK in 2016)

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## I. SCIENTIFIC OVERVIEW

Carprosol 50 mg/ml solution for injection for dogs and cats is produced and controlled using validated methods and tests, which ensure the consistency of the product released on the market. It is indicated for the control of post-operative pain and inflammation following orthopaedic and soft tissue (including intra-ocular) surgery in dogs and or the control of post-operative pain following surgery in cats.

The product can be safely used in the target species; possible adverse reactions are indicated in the SPC.

Carprosol 50 mg/ml solution for injection for dogs and cats is considered safe for the user and for the environment, when used as recommended. Suitable warnings and precautions are indicated in the SPC.

The overall risk/benefit analysis is in favour of granting a marketing authorisation.

The safety and efficacy aspects of Carprosol 50 mg/ml solution for injection for dogs and cats are based on bioequivalence with the reference product Rimadyl solution for injection, REG NL 10101.

Warnings statements and precautions are adopted from the reference product.

Additional statements have been added, based on increased knowledge and the current state of science. Adverse events and contraindications are indicated in the SPC.

## II. QUALITY ASPECTS

### A. *Composition*

The product contains 50 mg carprofen and the following excipients: L-arginine, glycocholic acid, lecithin, benzyl alcohol and water for injection. Hydrochloric acid and sodium hydroxide are used for pH adjustment.

The product is packed in amber type I glass bottles of 50 ml, fitted with bromobutyl rubber stoppers and aluminium caps. The glass vials and stoppers are in conformity with the Ph.Eur. requirements

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 from a licensed manufacturing site.

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The product is manufactured using conventional manufacturing techniques. The tests performed during production are described and include tests on bioburden, filter integrity, fill volume, visible particles as well as temperature and time during sterilisation.

Suitable process validation has been conducted on two in initial production scale batches. Validation of the manufacturing process will be fulfilled on the first two larger post-marketing batches.

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

The active substance is carprofen, an established active substance described in the European/British Veterinary 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.

The excipients are in conformity with compendial or in-house requirements

The glass vials and stoppers are in conformity with the Ph.Eur. requirements

The declaration concerning glycocholic acid has been provided. No other excipients are within the scope of the TSE Guideline present or used in the manufacture of this product.

### ***D. Control on intermediate products***

Not applicable.

### ***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. These tests include appearance, colour, relative density, visible particulars, pH, extractable volume, assay of carprofen, related substances, assay of benzyl alcohol, assay of benzaldehyde and sterility. Satisfactory validation data for the analytical methods have been provided.

Batch analytical data from two production batches (111109, 111111) from the proposed production site have been provided demonstrating compliance with the specification.

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## **F. Stability**

Stability data on the active substance have been provided in accordance with applicable European guidelines, confirming the retest period 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. Two production batches (11I109, 11I111) were stored for 6 months at 25°C/60% RH (accelerated) and up to 12 months at 2-8°C (long term). The same attributes as with release were tested demonstrating the stability of the product throughout its shelf life when stored under the approved conditions.

The claim of 28 days stability after broaching has been justified.

Shelf life: 2 years

In-use shelf life: 28 days

## **G. Other Information**

Storage conditions: Store in a refrigerator (2-8°C).

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

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

### **User Safety**

The applicant has provided a brief user safety assessment. Combined with increased knowledge and the current state of science, warning statements and precautions have been added to the product literature, ensuring safety to users of Carprosol 50 mg/ml solution for injection for dogs and cats. The user safety warnings are:

*“People with known hypersensitivity to carprofen should avoid contact with the veterinary medicinal product.*

*Care should be taken to avoid accidental self-injection. In case of accidental self-injection seek medical advice immediately and show the package leaflet or the label to the physician.*

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*Carprofen, in common with other NSAIDs, has been shown to exhibit photosensitising potential in laboratory studies.*

*Avoid contact with skin and eyes. Wash off any splashes immediately with clean, running water. Seek medical attention if irritation persists.”*

### **Ecotoxicity**

The applicant provided a first phase environmental risk assessment in compliance with the relevant guideline which showed that no further assessment is required, as the product is indicated for non-food animals (dog, cat).

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

As this is a generic application according to Article 13, and bioequivalence with a reference product has been demonstrated, efficacy studies are not required. The efficacy claims for this product are essentially equivalent to those of the reference product.

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

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

However, an extensive overview of tolerance data presented in public literature has been provided by the applicant. This data shows that the product is well tolerated in dogs and cats. Additionally, based on increased knowledge and the current state of science, warning statements and precautions have been added to the product literature ensuring safety to the target animals.

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

The data submitted in the dossier demonstrate that when Carprosol 50 mg/ml solution for injection for dogs and cats 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.



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### 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 Heads of Veterinary Medicines 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.

Summary of change	Section updated	Approval date
Extension of the shelf life of the finished product as packaged for sale from 18 months to 2 years (NL/V/0174/001/IB/001).	Section II	1 April 2015
Change in the batch size up to 10-fold compared to the originally approved batch size of the finished product (NL/V/0174/001/IB/002).	N/A	29 March 2017
DDPS update dd 06.05.2015, introducing an electronic and validated safety database, and including some editorial changes (NL/V/0174/001/IA/003).	N/A	29 March 2017
Renewal (NL/V/0174/001/R/001)	N/A	17 May 2019
Update Active Substance Master File (DE/V/xxxx/WS/062)	N/A	Ongoing