



**ASSURING THE SAFETY, QUALITY AND EFFICACY
OF VETERINARY MEDICINES**

**United Kingdom
Veterinary Medicines Directorate
Woodham Lane
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NATIONAL PROCEDURE

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

Prednidale 25 Tablets for Dogs

MODULE 1

PRODUCT SUMMARY

Name, strength and pharmaceutical form	Prednidale 25 Tablets for Dogs
Applicant	Dechra Limited Dechra House Jamage Industrial Estate Talke Pits Stoke-on-Trent ST7 1XW UK
Active substance	Prednisolone
ATC Vetcode	QH02AB06
Target species	Dogs
Indication for use	For the treatment of inflammatory and allergic diseases, including some autoimmune diseases and some neoplastic conditions, in dogs. Inflammatory, allergic and autoimmune processes may be involved in cutaneous, alimentary, respiratory, musculo-skeletal and haematological manifestations of disease.

MODULE 2

The Summary of Product Characteristics (SPC) for this product is available on the Veterinary Medicines Directorate website (www.vmd.defra.gov.uk)

MODULE 3

PUBLIC ASSESSMENT REPORT

Legal basis of original application	Line Extension, Full application in accordance with Article 13 of Directive 2001/82/EC as amended.
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I. SCIENTIFIC OVERVIEW

Prednidale 25 Tablets for Dogs are oral tablets containing the active substance prednisolone. The product is indicated for the treatment of inflammatory and allergic diseases, including some autoimmune diseases and some neoplastic conditions in dogs. The product was originally authorised as a Line Extension of an existing authorisation for Prednidale 5, a tablet delivering 5 mg of prednisolone. There was a further Renewal Procedure in August 2012. The Line Extension was originally introduced to allow for easier dosing of larger animals or those receiving doses at the higher end of the recommended range, 0.1 – 2.0 mg prednisolone per kilogram of bodyweight.

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 slight reactions observed are indicated in the SPC¹. 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 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. QUALITY ASPECTS

A. *Composition*

The product contains the active substance prednisolone and excipients lactose monohydrate, maize starch, pregelatinised maize starch, stearic acid, purified talc and magnesium stearate. Certificates of analysis for four batches of the product show consistency and compliance with the specification.

The product is supplied in polypropylene containers with low density polyethylene push-fit, tamper evident closures, containing 100 tablets. The particulars of the containers and controls performed are provided and conform to current guidelines.

The choice of the formulation has been justified.

¹ SPC – Summary of product characteristics.

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

Process validation data on the product have been presented in accordance with the relevant European guidelines. The product is manufactured fully in accordance with the principles of good manufacturing practice from a licensed manufacturing site. Conventional tableting procedures are used: some of the starting materials are mixed, blended and then granulated with purified water. After drying the resulting granules are passed through a sieve and blended with the remaining starting materials. Tablet compression then takes place. 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 prednisolone, an established active substance described in the European Pharmacopoeia (Ph. Eur.) A copy of the current EDQM certificate of suitability has been provided. A specimen certificate of analysis shows compliance of one batch with the requirements of the pharmacopoeial monograph and the additional testing specified in the certificate of suitability. The active substance is manufactured in accordance with the principles of good manufacturing practice for starting materials

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. Testing for compliance with the requirements of the relevant monograph of the European Pharmacopoeia is appropriately required for each excipient. Specimen certificates of analysis have been supplied.

Specifications have been presented for the polypropylene tub and its low-density polyethylene, tamper-evident closure. In each case appearance and dimensions are checked, together with integrity of fit for the closure. Tests for identity of the polymers used in the construction of the pack have been provided and show that the components comply with the European requirements for food and pharmaceutical use.

D. Specific Measures concerning the Prevention of the Transmission of Animal Spongiform Encephalopathies

Scientific data 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.

E. Control on intermediate products

There are no intermediate products.

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 site have been provided demonstrating compliance with the specification.

G. Stability

Active substance

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.

Finished Product

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. A shelf life of 18 months is justified for the product. The following pharmaceutical warnings should be applied:

Do not store above 25°C.
Store in tightly closed original container.
Store in a dry place.

H. Genetically Modified Organisms

Not applicable.

J. Other Information

Shelf life of the veterinary medicinal product as packaged for sale: 18 months.

III. SAFETY AND RESIDUES ASSESSMENT (PHARMACOTOXICOLOGICAL)

This application was a Line Extension for a marketing authorisation in the UK made in accordance with Article 13 of the Directive 2001/82/EC as amended by Directive 2004/28/EC, to introduce a 25 mg strength of Prednidale tablets, to aid in the administration to large dogs. The applicant cross-refers to Part III of the dossier submitted in support of the currently marketed Prednidale 5 mg tablets.

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 and the environment.

III.A Safety Testing

User Safety

The applicant provided an updated user risk assessment during the original Line Extension procedure, and additional items were added to the SPC, which now states the following:-

- Wash hands/affected area thoroughly after any accidental spillage.
- As buprenorphine has opioid-like activity, care should be taken to avoid accidental self-injection.
- In case of accidental self-injection or ingestion, seek medical advice immediately and show the package leaflet or the label to the physician.
- Following eye contamination or skin contact, wash thoroughly with cold running water, seek medical advice if irritation persists.

The tablets are also supplied in a container with a child proof closure.

Ecotoxicity

Prednidale 25 is indicated for use only in dogs and as such environmental exposure is considered not to be extensive. The environmental impact assessment provided supports this conclusion. The assessment of environmental risk can stop at Phase I.

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

IV CLINICAL ASSESSMENT (EFFICACY)

IV.A Pre-Clinical Studies

Pharmacology

Pharmacodynamics

Prednisolone is a synthetic glucocorticoid with anti-inflammatory and immunosuppressant properties. Only slight mineralocorticoid activity is seen. Prednisolone is used to control a wide range of disorders.

Pharmacokinetics

Prednisolone is easily absorbed from the gastro-intestinal tract. Peak plasma concentrations are reached one to two hours after administration, with a plasma half-life of between two and three hours being observed. There is extensive binding to plasma proteins, and it is excreted in the urine as free and conjugated metabolites and parent compound. It has a biological half-life of several hours, making it suitable for alternate-day therapy.

Tolerance in the Target Species of Animals

Administration of single high doses are generally tolerated well, but medium to long-term use may provoke reactions. Corticosteroid therapy may lead to increased time in the healing of wounds and to a reduction in the ability of the body to resist infection. Appropriate anti-infective therapy may be required.

Corticosteroids are not recommended for use in pregnant animals. Studies in laboratory animals have shown that administration during early pregnancy may cause foetal abnormalities. Administration during the later stages of pregnancy may cause abortion or early parturition.

Insignificant amounts of prednisolone are generally eliminated in the milk of lactating animals, and therefore such use is not contraindicated.

IV.B Clinical Studies

Laboratory Trials

The applicant submitted a study to demonstrate the bioequivalence of prednisolone 5 mg and prednisolone 25 mg tablets following oral administration, for the Line Extension procedure. This study successfully demonstrated bioequivalence of the two tablet sizes. Since bioequivalence has been established there is no requirement to provide further data.

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 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 Product Information Database of the Veterinary Medicines Directorate website.

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.

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