

## **SUMMARY OF PRODUCT CHARACTERISTICS**

### **1. NAME OF THE VETERINARY MEDICINAL PRODUCT**

Calciject LV Solution For Injection

### **2. QUALITATIVE AND QUANTITATIVE COMPOSITION**

#### **Active Substance:**

Each 100 ml contains 4.2 g calcium (provided by calcium gluconate, calcium borogluconate and calcium hydroxide) and 0.78 g magnesium (provided by magnesium chloride hexahydrate). Also contains 7.34% w/v boric acid.

#### **Excipients:**

For a full list of excipients, see section 6.1

### **3. PHARMACEUTICAL FORM**

Solution for Injection

A clear colourless to pale yellow solution for injection

### **4. CLINICAL PARTICULARS**

#### **4.1 Target species**

Cattle

#### **4.2 Indications for use, specifying the target species**

Indicated in the treatment of hypocalcaemia in cattle complicated by a deficiency of magnesium

#### **4.3 Contraindications**

None

#### **4.4 Special Warnings for each target species**

In cases of acute hypomagnesaemia the administration, by appropriate routes, of a solution with a higher concentration of magnesium may be necessary.

#### **4.5 Special precautions for use**

i. Special precautions for use in animals

Solutions for intravenous injection should be warmed to body temperature and infused slowly.

The product does not contain an antimicrobial preservative. Any solution remaining in the vial following withdrawal of required dose should be discarded.

ii. Special precautions to be taken by the person administering the veterinary medicinal product to animals

Care should be taken to avoid accidental self-injection: may cause irritation at site of injection.

#### **4.6 Adverse reactions (frequency and seriousness)**

Rapid intravenous injection may result in cardiac arrhythmias and in severely toxæmic cows, collapse and death.

#### **4.7 Use during pregnancy, lactation or lay**

Provided the above precautions are observed the product should be safe for use during pregnancy and lactation.

#### **4.8 Interaction with other medicinal products and other forms of interaction**

Not applicable.

#### **4.9 Amounts to be administered and administration route**

Slow intravenous injection

Subcutaneous injection

Massage the site gently after administration.

Dosage: Cattle - 100 - 200 ml

#### **4.10 Overdose (symptoms, emergency procedures, antidotes), if necessary**

Rapid intravenous injection may result in cardiac arrhythmias or heart block. Therefore intravenous injections should be given slowly and stopped on the first signs of adverse reaction.

#### 4.11 Withdrawal period

Cattle - Meat: Zero Days  
Milk: Zero Hours

### 5. PHARMACOLOGICAL PROPERTIES

**Pharmacotherapeutic group:** Mineral supplements, Calcium, Calcium, combinations with other drugs

**ATC Vet Code:** QA12AX

#### 5.1 Pharmacodynamic properties

Calcium borogluconate, calcium hydroxide and magnesium chloride hexahydrate are soluble salts of calcium and magnesium respectively, used extensively in fluid metabolite preparations. On parenteral administration they rapidly increase plasma concentrations of calcium and magnesium. This is effective in the treatment of hypocalcaemia with associated hypomagnesaemia.

#### 5.2 Pharmacokinetic properties

After injection of Calciject LV plasma levels of calcium and magnesium were recorded at  $2.51 \pm 0.039$  mmol/L and  $0.889 \pm 0.041$  mmol/L respectively which are within the normal ranges for plasma calcium and magnesium.

Mean  $C_{max}$  values for calcium of  $4.2 \pm 0.08$  mmol/L were obtained following administration of Calciject LV. The corresponding mean AUC values for calcium were  $61.38 \pm 0.59$  mmol/L.hr

### 6. PHARMACEUTICAL PARTICULARS

#### 6.1 List of excipients

Phosphoric Acid, Concentrated.  
Sodium Hydroxide  
Water for Injections

#### 6.2 Incompatibilities

None Known

**6.3 Shelf life**

Shelf life of the veterinary medicinal product as packaged for sale: 2 Years.

**6.4 Special precautions for storage**

Do not store above 25°C.  
Protect from light.

This product does not contain an antimicrobial preservative.  
Any solution remaining in the vial following withdrawal of the required dose should be discarded.

**6.5 Nature and composition of immediate packaging**

Packaged in 100 ml clear grade II glass vials with bromobutyl bungs and aluminium caps

**6.6 Special precautions for the disposal of unused veterinary medicinal product or waste materials derived from the use of such products**

Any unused veterinary medicinal product or waste materials derived from such veterinary medicinal products should be disposed of in accordance with local requirements.

**7. MARKETING AUTHORISATION HOLDER**

Norbrook Laboratories Limited  
Station Works,  
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NEWRY  
Co. Down, BT35 6JP  
Northern Ireland

**8. MARKETING AUTHORISATION NUMBER(S)**

**Vm** 02000/4124

**9. DATE OF FIRST AUTHORISATION**

20th December 1994

**10. DATE OF REVISION OF THE TEXT**

June 2010