

## **SUMMARY OF PRODUCT CHARACTERISTICS**

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

Caniphedrin 50 mg tablets for dogs

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

Each tablet contains:

**Active substance:**

Ephedrine hydrochloride 50 mg  
(equivalent to 41.0 mg Ephedrine)

**Excipients:**

<b>Qualitative composition of excipients and other constituents</b>
Gelatin
Potato starch
Lactose monohydrate
Talc
Cellulose, microcrystalline
Glycerol 85 %

White tablets with score line. The tablets can be divided into 2 equal parts.

### **3. CLINICAL INFORMATION**

#### **3.1 Target species**

Dogs

#### **3.2 Indications for use for each target species**

Treatment of urinary incontinence caused by urethral sphincter mechanism incompetence in ovariohysterectomised female dogs.

#### **3.3 Contraindications**

Do not use in dogs with cardiovascular disease (i.e. cardiomyopathy, tachycardic arrhythmia, hypertension), hyperthyroidism, diabetes mellitus, impaired renal function or glaucoma.

Do not use concurrently with halogenated narcotics such as halothane or methoxyflurane (see section 3.8).

Do not use in cases of hypersensitivity to the active substance or to any of the excipients.

### 3.4 Special warnings

It is not appropriate to use the veterinary medicinal product for the behavioural cause of inappropriate urination.

In bitches less than 1 year old the possibility of anatomical disorders contributing to incontinence should be considered prior to treatment.

It is important to identify any underlying disease causing Polyuria/Polydipsia (PU/PD) which may be falsely diagnosed as urinary incontinence.

### 3.5 Special precautions for use

#### Special precautions for safe use in the target species:

The dog's cardiovascular functionality should be carefully assessed before the start of the treatment with the veterinary medicinal product and it should be periodically monitored during the treatment.

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

People with known hypersensitivity to ephedrine should avoid contact with the veterinary medicinal product.

Ephedrine hydrochloride could be toxic if ingested and ingestion may be fatal, especially to children. Adverse effects may include insomnia and nervousness, dizziness, headache, increased blood pressure, increased sweating and nausea.

To avoid accidental ingestion, particularly by a child, the veterinary medicinal product must be administered out of the sight of children. Unused tablet parts should be returned to the open blister space and inserted back into the carton and kept in a safe place out of the sight and reach of children.

In case of accidental ingestion, most importantly by children, seek medical advice immediately and show the package leaflet or the label to the physician.

It is strongly recommended that pregnant women should wear impermeable gloves when handling the tablets.

Wash hands thoroughly after administration of the veterinary medicinal product.

#### Special precautions for the protection of the environment:

Not applicable.

### 3.6 Adverse events

#### **Dogs:**

Rare (1 to 10 animals / 10 000 animals treated):	Rapid pulse rate <sup>1</sup> , Ventricular arrhythmia <sup>1</sup> ; Excitation <sup>1</sup> .
Undetermined frequency (cannot be estimated from the available data):	Tachycardia <sup>2</sup> , Atrial fibrillation <sup>2</sup> , Increased heart rate <sup>2</sup> , Peripheral vasoconstriction <sup>2</sup> ; Not sleeping <sup>2</sup> , Anxiety <sup>2</sup> ; Muscle tremor <sup>2</sup> , Mydriasis <sup>2</sup> ;

	Pulmonary disorder (bronchodilatation and decrease of mucus release in the respiratory mucosal membranes) <sup>2</sup> ; Digestive tract hypomotility <sup>2</sup> .
--	---

<sup>1</sup>These symptoms disappear following dose reduction or termination of treatment.

<sup>2</sup>Due to the pharmacological properties of ephedrine these effects can occur at the recommended therapeutic dose.

Reporting adverse events is important. It allows continuous safety monitoring of a veterinary medicinal product. Reports should be sent, preferably via a veterinarian, to either the marketing authorisation holder or the national competent authority via the national reporting system. See the package leaflet for respective contact details.

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

Not applicable.

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

The potency of ephedrine and the risk of adverse reactions may be increased when administered together with methylxanthines and sympathomimetics.

Ephedrine may enhance glucocorticoid metabolism.

Concomitant use with MAO-inhibitors may cause hypertension.

Ephedrine may increase the risk for theophylline toxicity.

There is a risk of cardiac arrhythmia when combined with cardiac glycosides (e.g. digoxin), quinine, tricyclic antidepressants and halogenated narcotics (see section 3.3).

Substances leading to an increase in pH of the urine are able to prolong the excretion of ephedrine, which may lead to an increased risk of adverse reactions.

Substances leading to a decrease in pH of the urine are able to accelerate the excretion of ephedrine, which may lead to decreased efficacy.

Vascular constrictions can occur after concomitant treatment with ergot alkaloids and oxytocin.

Sympatholytics may decrease the efficacy of ephedrine.

### **3.9 Administration routes and dosage**

Oral use.

The tablets can be divided into 2 equal parts to ensure accurate dosing.

The recommended starting dose is 2 mg ephedrine hydrochloride (corresponding to 1.64 mg of ephedrine) per kg bodyweight (BW), equivalent to 1 tablet per 25 kg BW, per day during the first 10 days of treatment. The daily dose may be divided. Once the desired effect has been achieved, the dose can be reduced to one half or less.

Based on the observed effect and taking into account the occurrence of adverse effects, the individual dose should be adjusted to find the lowest effective dose. The lowest effective dose should be maintained for long-term treatment. In case of a relapse, the dose should be increased to 2 mg ephedrine hydrochloride per kg BW

again. Once the effective dose has been established, dogs should still be monitored at regular intervals.

This tablet strength is not appropriate for dogs weighing less than 12.5 kg (recommended starting dose of 2 mg/kg).

### **3.10 Symptoms of overdose (and where applicable, emergency procedures and antidotes)**

At high overdoses, the following adverse events can occur: tachycardia, tachyarrhythmia, vomiting, increased transpiration, hyperventilation, muscle weakness, tremor with hyperexcitation and restlessness, anxiety and insomnia.

The following symptomatic treatment may be initiated:

- gastric lavage, if necessary
- in case of severe hyperexcitation, administration of sedatives such as diazepam or neuroleptics
- in case of tachyarrhythmia, administration of Beta-Blockers
- accelerated excretion by acidification of the urine and enhanced diuresis

### **3.11 Special restrictions for use and special conditions for use, including restrictions on the use of antimicrobial and antiparasitic veterinary medicinal products in order to limit the risk of development of resistance**

*(to be completed in accordance with national requirements)*

### **3.12 Withdrawal periods**

Not applicable.

## **4. PHARMACOLOGICAL INFORMATION**

### **4.1 ATCvet code: QG04BX90**

### **4.2 Pharmacodynamics**

Ephedrine directly stimulates alpha- and beta-adrenergic receptors, present in all organ systems. It also stimulates the release of catecholamines from sympathetic neurons. Since Ephedrine passes the blood-brain barrier, it also induces effects that are mediated through the central nervous system. Ephedrine specifically causes a contraction of the internal urethral sphincter muscles and a relaxation of the bladder muscles through a sympathicomimetic action on the adrenergic receptors.

### **4.3 Pharmacokinetics**

After oral administration it is rapidly and practically completely absorbed, whereby peak plasma levels are achieved after one hour. Ephedrine is rapidly distributed in all tissues and can also gradually penetrate the CNS. Ephedrine is not degraded via the

endogenous catecholamine pathways, which explains the prolonged duration of activity compared to adrenaline. N-demethylation generates norephedrine as the

major metabolite, a potent metabolite that is formed very rapidly in dogs and appears to contribute significantly to the effect of ephedrine. Elimination takes place via the kidneys and is nearly completed after 24 hours. The half-life is 3 to 6 hours.

## **5. PHARMACEUTICAL PARTICULARS**

### **5.1 Major incompatibilities**

Not applicable.

### **5.2 Shelf life**

Shelf life of the veterinary medicinal product as packaged for sale: 3 years

### **5.3 Special precautions for storage**

Keep the blisters in the outer carton in order to protect from light. Do not refrigerate or freeze.

Unused divided tablets should be returned to the blister and used in the subsequent dose.

### **5.4 Nature and composition of immediate packaging**

Heat-sealed blister pack, consisting of aluminium foil and a PVC foil with 10 tablets per blister.

#### Package size:

Cardboard box containing 10 blisters of 10 tablets each.

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

Medicines should not be disposed of via wastewater.

Use take-back schemes for the disposal of any unused veterinary medicinal product or waste materials derived thereof in accordance with local requirements and with any national collection systems applicable to the veterinary medicinal product concerned.

## **6. NAME OF THE MARKETING AUTHORISATION HOLDER**

VetViva Richter GmbH

## **7. MARKETING AUTHORISATION NUMBER**

Vm 57446/4020

**8. DATE OF FIRST AUTHORISATION**

5 August 2020

**9. DATE OF THE LAST REVISION OF THE SUMMARY OF THE PRODUCT CHARACTERISTICS**

January 2025

**10. CLASSIFICATION OF VETERINARY MEDICINAL PRODUCT**

Veterinary medicinal product subject to prescription.

Find more product information by searching for the 'Product Information Database' on [www.gov.uk](http://www.gov.uk).

Approved 12 February 2025

*Gavin Hall*