1. NAME OF THE VETERINARY MEDICINAL PRODUCT

TRAMADOG, 50 mg/ml, solution for injection for dogs

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each 1 ml vial of solution contains:

Active substance:
Tramadol hydrochloride ..... 50.0 mg
(equivalent to 43.9 mg of tramadol base)

Excipients:
For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Solution for injection.
Clear, colourless liquid.

4. CLINICAL PARTICULARS

4.1 Target species

Dogs.

4.2 Indications for use, specifying the target species

For the reduction of mild postoperative pain.

4.3 Contraindications

Do not use in cases of hypersensitivity to tramadol or to any of the excipients.
Do not use in dogs receiving concomitant treatment with tricyclic antidepressants, MAO inhibitors or serotonin reuptake inhibitors.
Do not use in animals with epilepsy.

4.4 Special warnings for each target species

The analgesic effects of tramadol hydrochloride may be variable. This is thought to be due to individual differences in the metabolism of the drug to the primary active metabolite O-desmethyltramadol. In some dogs (non-responders), this may result in the product failing to provide analgesia. Dogs should therefore be monitored regularly to ensure sufficient efficacy.

4.5 Special precautions for use

Special precautions for use in animals
Use with caution in dogs with renal or hepatic impairment. In dogs with hepatic impairment the metabolism of tramadol to the active metabolites may be decreased which may reduce the efficacy of the product. One of the active metabolites of tramadol is renally excreted and therefore in dogs with renal impairment the dosing

regimen used may need to be adjusted. Renal and hepatic function should be monitored when using this product. See also section 4.8.

Special precautions to be taken by the person administering the veterinary medicinal product to animals
People with known hypersensitivity to tramadol or any of the excipients should avoid contact with the veterinary medicinal product.
Tramadol may cause nausea and dizziness following injection. Avoid accidental self-injection. If you develop symptoms following exposure, seek medical advice and show the package leaflet or the label to the physician. However, DO NOT DRIVE as sedation may occur.
There is inadequate evidence available on the safety of tramadol in human pregnancy. Pregnant women and women of childbearing age should therefore take great care when handling this product and, in the event of exposure, seek medical advice immediately.

4.6 Adverse reactions (frequency and seriousness)

Nausea and vomiting may occasionally be observed following administration of the veterinary medicinal product. In rare cases (more than 1 but less than 10 animals in 10,000 animals treated) hypersensitivity can occur. In cases of hypersensitivity reactions the treatment should be discontinued. In the event that a reaction due to use of the medicinal product is observed, withdrawal of treatment is recommended.

4.7 Use during pregnancy, lactation or lay

Pregnancy:
Laboratory studies in mice and/or rats and rabbits have not produced any evidence of teratogenic, foetotoxic, maternotoxic effects. Use only according to the benefit-risk assessment by the responsible veterinarian.

Lactation:
Laboratory studies in mice and/or rats and rabbits have not produced any evidence of adverse effects in the peri- and postnatal development of offspring. Use only according to the benefit-risk assessment by the responsible veterinarian.

Fertility:
In laboratory studies in mice and/or rats and rabbits, the use of tramadol at therapeutic doses did not adversely affect reproductive performance and fertility in males and females. Use only according to the benefit-risk assessment by the responsible veterinarian.

4.8 Interaction with other medicinal products and other forms of interaction

Concomitant administration of the veterinary medicinal product with central nervous system depressants may potentiate the CNS and respiratory depressant effects.
Tramadol may cause convulsions and intensify the effect of drugs that lower the convulsive threshold.
When the product is administered together with medicinal products with a sedative effect, the duration of sedation may be increased.

Drugs that inhibit (e.g. cimetidine and erythromycin) or induce (e.g. carbamazepine) CYP450 mediated metabolism may have an effect on the analgesic effect of tramadol. The clinical relevance of these interactions has not been studied in dogs.
The combination with mixed agonist/antagonists (e.g. buprenorphine, butorphanol) and tramadol is not advisable, because the analgesic effect of a pure agonist may be theoretically reduced in such circumstances.See also section 4.3.

4.9 Amounts to be administered and administration route

For intramuscular or intravenous injection.

Animals should be weighed to establish an accurate body weight prior to calculation of the appropriate treatment dose.

Route	Dose of tramadol (as hydrochloride)	Dose product
IM, IV	2-4 mg/kg bw *	0.04-0.08 ml/kg bw
Comments	*On the basis of the intensity of pain, repeat doses can be administered every 6 to 8 hours (3-4 times daily). The recommended maximum daily dose is 16 mg/kg. Intravenous administration must be carried out very slowly.	

As the individual response to tramadol is variable, and depends partly on the dosage, the age of the patient, individual differences in pain sensitivity and general condition, the optimal dosing regimen should be individually tailored using the above dose and re-treatment interval ranges. In the event of the product failing to provide adequate analgesia by 30 minutes following administration or for the duration of any planned re-treatment interval, a suitable alternative analgesic should be used.

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

In tramadol intoxication, symptoms similar to those observed with other centrally acting analgesics (opiates) are to be expected. These include, specifically, miosis, vomiting, cardiocirculatory collapse, disorders of consciousness including coma, convulsions and respiratory depression up to respiratory arrest.
General emergency measures: Maintain patency of airway, support cardiac and respiratory function according to symptoms. The antidote for respiratory depression is naloxone. However naloxone may not be useful in all cases of tramadol overdose as it may only partially reverse some of the other effects of tramadol and may increase the risk of seizures, although data on the latter are conflicting. In case of seizures, administer diazepam.

4.11 Withdrawal period(s)

Not applicable.

5. PHARMACOLOGICAL PROPERTIES

Pharmacotherapeutic group: Opioid analgesics.
ATCvet code: QN02AX02.

5.1 Pharmacodynamic properties

Tramadol is a centrally acting opiate analgesic with a complex mode of action exerted by its 2 enantiomers and primary metabolite, involving opioid, norepinephrine, and serotonin receptors. The (+) enantiomer of tramadol inhibits serotonin uptake. The (-) enantiomer inhibits norepinephrine reuptake. The metabolite O-desmethyltramadol has greater affinity for the μ-opioid receptors.
Unlike morphine, tramadol does not have depressing effects on respiration for an extensive analgesic dose range. Likewise, it does not affect gastrointestinal motility. The effects on the cardiovascular system tend to be mild. The analgesic potency of tramadol is about 1/10 to 1/6 of that of morphine. In humans genotypic differences result in up to 10% of individuals being non-responders to tramadol hydrochloride. In these individuals the analgesic effect of tramadol is decreased or absent. A similar phenomenon is known to exist in dogs, however the percentage of dogs affected is not known.

5.2 Pharmacokinetic particulars

After intramuscular administration, the absorption is almost total, with bioavailability of 92%. Protein binding of tramadol is moderate (15%). Tramadol is metabolized in the liver by cytochrome P450 mediated demethylation followed by conjugation with glucuronic acid. Elimination occurs mainly via the kidneys, with an elimination half-life of about 0.5 - 2 hours.
Anaesthesia can modify the kinetic of tramadol.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Sodium acetate trihydrate
Water for injections

6.2 Major incompatibilities

In the absence of compatibility studies, this veterinary medicinal product should not be mixed with other veterinary medicinal products.

6.3 Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: 48 months.
Shelf life after first opening the immediate packaging: Use immediately after opening.
Any solution remaining in the ampoule following withdrawal of the required dose should be discarded.

6.4 Special precautions for storage

This veterinary medicinal product does not require any special storage conditions.

6.5 Nature and composition of immediate packaging

Cardboard box of 10 colourless glass ampoules type I of 1 ml.

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 product should be disposed of in accordance with local requirements.

7. MARKETING AUTHORISATION HOLDER

DOMES PHARMA
3 rue André Citroën
63430 PONT-DU-CHATEAU
France

8. MARKETING AUTHORISATION NUMBER

VPA23340/003/001

9. DATE OF FIRST AUTHORISATION

Date of first authorisation: 13 April 2018

10. DATE OF REVISION OF THE TEXT

October 2022