

## 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Tolfine 80 mg/ml solution for injection for cattle

## 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml contains:

### Active substance:

Tolfenamic acid 80 mg

### Excipients:

| Qualitative composition of excipients and other constituents |
|--------------------------------------------------------------|
| Diethylene glycol monoethyl ether                            |
| Ethanolamine                                                 |
| Water for injections                                         |

Clear colourless to slightly yellow-brown solution.

## 3. CLINICAL INFORMATION

### 3.1 Target species

Cattle.

### 3.2 Indications for use for each target species

The veterinary medicinal product is indicated as:

- Adjunct treatment for the reduction of acute inflammation associated with respiratory diseases.
- Adjunct treatment of acute mastitis.

### 3.3 Contraindications

Do not use in cases of cardiac disease.

Do not use in cases of impaired hepatic function or acute renal insufficiency.

Do not use in cases of ulceration or digestive bleeding or in cases of blood dyscrasia.

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

Do not administer other steroidal or non-steroidal anti-inflammatory drugs concurrently or within 24 hours of each other.

Do not use in dehydrated, hypovolaemia or hypotensive animals, due to its potential risk of renal toxicity.

### 3.4 Special warnings

Non-steroidal anti-inflammatory drugs (NSAIDs) can cause inhibition of phagocytosis and hence in the treatment of inflammatory conditions associated with bacterial infections appropriate concurrent antimicrobial therapy should be instigated.

### 3.5 Special precautions for use

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

Do not exceed the stated dosage and duration of treatment. Use aseptic precautions when administering the product.

Concurrent administration of potential nephrotoxic drugs should be avoided.

Young and aged animals are more sensitive to the digestive and renal side-effects of NSAIDs. Such a use should be done with careful clinical management.

In case of undesirable effects (digestive or renal side-effects) occurring during the treatment, your veterinarian should be contacted for advice and the possibility of stopping treatment should be considered.

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

The veterinary medicinal product is irritant to eyes.

In case of accidental eye exposure, flush the eyes immediately with clean water and seek medical advice immediately.

The veterinary medicinal product is irritant to skin. In case of accidental spillage onto skin, wash the skin immediately with soap and water.

Seek medical attention if irritation persists.

Wash hands after use.

In case of accidental self-injection, seek medical advice immediately and show the package leaflet or label to the physician.

People with known hypersensitivity to non-steroidal anti-inflammatory drugs (NSAIDs) should avoid contact with the veterinary medicinal product.

In view of the risk of accidental self-injection and the known adverse class-effects of NSAIDs on pregnancy and/or embryofetal development, pregnant women or women attempting to conceive should administer this veterinary medicinal product with care.

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

Not applicable.

### 3.6 Adverse events

Cattle:

|                                                    |                                                                                     |
|----------------------------------------------------|-------------------------------------------------------------------------------------|
| Common<br>(1 to 10 animals / 100 animals treated): | Injection site inflammation <sup>1,3</sup> , Injection site swelling <sup>1,3</sup> |
| Very rare                                          | Collapse <sup>2,3</sup>                                                             |

|                                                                      |                                                                                                                                     |
|----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| ( $<1$ animal / 10,000 animals treated, including isolated reports): | Diarrhoea <sup>3</sup> , Haemorrhagic diarrhoea <sup>3</sup><br>Hypersensitivity reaction <sup>3</sup> , Anaphylaxis <sup>3,4</sup> |
|----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|

<sup>1</sup> Transient, lasting up to 38 days.

<sup>2</sup> After rapid intravenous injection.

<sup>3</sup> If relevant, the benefit-risk assessment should be re-assessed for the second administration.

<sup>4</sup> Sometimes fatal.

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 its local representative 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

#### Pregnancy:

Use only according to the benefit-risk assessment by the responsible veterinarian. NSAIDs might delay parturition through a tocolytic effect by inhibiting prostaglandins that are important in signalling the initiation of parturition.

#### Lactation:

Can be used during lactation.

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

Do not administer other steroidal or non-steroidal anti-inflammatory drugs concurrently or within 24 hours of each other.

Other NSAIDs, diuretics, anticoagulants and substances with high affinity to plasma proteins may compete for binding and produce toxic effects.

Do not administer in conjunction with anticoagulants.

Avoid simultaneous administration of potentially nephrotoxic drugs.

Do not administer in conjunction with glucocorticoids.

### 3.9 Administration routes and dosage

Intramuscular and intravenous use.

As an adjunct in the treatment of acute inflammation associated with respiratory disease in cattle, the recommended dosage is 2 mg tolfenamic acid per kg bodyweight (corresponding to 1 ml of the product/40 kg bodyweight) by intramuscular injection into the neck area. Treatment may be repeated once after 48 hours.

The maximum injected volume is 18 ml per intramuscular injection site.

As an adjunct in the treatment of acute mastitis, the recommended dosage is 4 mg tolfenamic acid per kg bodyweight (corresponding to 1 ml of the product/20 kg bodyweight) as a single intravenous injection.

When administered intravenously, the product should be injected slowly. At the first signs of intolerance, the injection should be interrupted.

As the vial should not be broached more than 15 times, the user should select the most appropriate vial size according to the size and number of cattle to be treated.

When treating groups of animals in one run, use a draw-off needle that has been placed in the vial stopper to avoid excess broaching of the stopper. The draw-off needle should be removed after treatment.

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

At high dosages, neurological disorders have been observed.

Symptoms of overdose include: excitation, salivation, tremors, vibration of the eyelids and ataxia. These symptoms are short-term in nature. Reversible kidney damage resulting in elevated plasma urea and creatinine levels is also possible. An antidote is not known. In case of overdose, stop tolafenamic acid administration and administer symptomatic treatment.

### **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.**

Not applicable.

### **3.12 Withdrawal periods**

Intramuscular injection:

Meat and offal: 20 days.

Milk: 0 hours.

Intravenous injection:

Meat and offal: 4 days.

Milk: 12 hours.

## **4. PHARMACOLOGICAL INFORMATION**

### **4.1 ATCvet code:**

QM01AG02.

### **4.2 Pharmacodynamics**

Tolafenamic acid (N-(2-methyl-3-chlorophenyl) anthranilic acid) is a non-steroidal anti-inflammatory drug (NSAID) belonging to the fenamate group. Tolafenamic acid exerts anti-inflammatory, analgesic and antipyretic activities.

The anti-inflammatory activity of tolafenamic acid is mainly due to an inhibition of cyclo-oxygenase and thus to a reduction of the synthesis of prostaglandins and thromboxanes, which are important inflammatory mediators.

### **4.3 Pharmacokinetics**

In cattle, tolafenamic acid injected by I.M. route at a dose of 2 mg/kg is rapidly absorbed from the injection site with mean maximum plasma concentrations of  $1.77 \pm 0.45$  µg/ml obtained at 2.4 hours (0.25-8 hours).

The volume of distribution is approximately 1.3 l/kg.

The absolute bioavailability is high.

Tolafenamic acid is extensively bound to plasma albumin (>97 %).

Tolfenamic acid is distributed in all the organs with a high concentration in the plasma, digestive tract, liver, lungs and kidneys. However, the concentration in the brain is low. Tolfenamic acid and its metabolites do not cross the placenta to any great extent.

Tolfenamic acid distribution involves extracellular fluids where concentrations similar to plasma are achieved both in healthy and inflamed peripheral tissues. It also appears in milk in the active form, mainly associated with the curds.

Tolfenamic acid undergoes extensive enterohepatic recirculation and, as a result prolonged concentrations are found in plasma.

The elimination half-life varies from 8 to 15 hours.

Tolfenamic acid is eliminated mainly unchanged in faeces (~30 %) and urine (~70 %).

## **5. PHARMACEUTICAL PARTICULARS**

### **5.1 Major incompatibilities**

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

### **5.2 Shelf life**

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

Shelf life after first opening the immediate packaging: 28 days.

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

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

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

Amber type I glass vials closed with chlorobutyl rubber stoppers and oversealed with an aluminium seal with a polypropylene flip-off cap.

Each vial is packaged in a cardboard box.

#### Package sizes:

Cardboard box with 1 vial of 50 ml.

Cardboard box with 1 vial of 100 ml.

Cardboard box with 1 vial of 250 ml.

Not all pack sizes may be marketed.

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

Medicines should not be disposed of via wastewater or household waste.

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**

Vetoquinol S.A.

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

VPA10521/017/001

**8. DATE OF FIRST AUTHORISATION**

26/08/2022

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

21/05/2026

**10. CLASSIFICATION OF VETERINARY MEDICINAL PRODUCTS**

Veterinary medicinal product subject to prescription.

Detailed information on this veterinary medicinal product is available in the [Union Product Database \(https://medicines.health.europa.eu/veterinary\)](https://medicines.health.europa.eu/veterinary).