

## **SUMMARY OF PRODUCT CHARACTERISTICS**

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

Equioxx 8.2 mg/g Oral Paste for Horses

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

Each syringe contains 7.32 g of paste and delivers:

Firocoxib 8.2 mg/g

For the full list of excipients, see section 6.1.

### **3. PHARMACEUTICAL FORM**

Oral paste.

White to off-white paste.

### **4. CLINICAL PARTICULARS**

#### **4.1 Target species**

Horses.

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

Alleviation of pain and inflammation associated with osteoarthritis and reduction of associated lameness in horses.

#### **4.3 Contraindications**

Do not use in animals suffering from gastrointestinal disorders and haemorrhage, impaired hepatic, cardiac or renal function and bleeding disorders.

Do not use in breeding, pregnant or lactating animals (see section 4.7).

Do not use concomitantly with corticosteroids or other non-steroidal anti-inflammatory drugs (NSAIDs) (see section 4.8).

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

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

None.

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

##### Special precautions for use in animals

Do not use in animals less than 10 weeks. If side effects occur, treatment should be discontinued and the advice of a veterinarian should be sought. Avoid use in any dehydrated, hypovolaemic or hypotensive animal, as there may be potential risk of increased renal toxicity. Concurrent administration of potentially nephrotoxic veterinary medicinal products should be avoided.

The recommended treatment dose and duration should not be exceeded.

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

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

Avoid contact with eyes and skin. If it occurs, rinse affected area immediately with water. Wash hands after use of the veterinary medicinal product.

Like other medicinal products that inhibit COX-2, pregnant women or women attempting to conceive should avoid contact with, or wear disposable gloves, when administering the veterinary medicinal product.

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

Lesions (erosion/ulceration) of the oral mucosa and of the skin around the mouth were very commonly observed in treated animals during tolerance studies. These lesions were mild and resolved without treatment. Salivation and labial and tongue oedema have been uncommonly associated with the oral lesions in a field study.

The frequency of adverse reactions is defined using the following convention:

- very common (more than 1 in 10 animals treated displaying adverse reaction(s))
- common (more than 1 but less than 10 animals in 100 animals treated)
- uncommon (more than 1 but less than 10 animals in 1,000 animals treated)
- rare (more than 1 but less than 10 animals in 10,000 animals treated)
- very rare (less than 1 animal in 10,000 animals, including isolated reports treated)

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

No data is available in horses. However, studies with laboratory animals have shown embryofoetotoxicity, malformations, delayed parturition and decreased pup survival. Therefore, do not use in breeding, pregnant or lactating animals.

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

Other NSAIDs, diuretic and substances with high protein binding may compete for

binding and lead toxic effects. Do not use concomitantly with corticosteroids or other NSAIDs.

Pre-treatment with other anti-inflammatory substances may result in additional or increased adverse effects and a treatment-free period with such medicinal products should therefore be observed. The treatment-free period should take into account the pharmacological properties of the medicinal products used previously.

Concomitant treatment with molecules displaying action on renal flow (e.g. diuretics) should be subject to clinical monitoring. Concurrent administration of potentially nephrotoxic medicinal products should be avoided as there might be an increased risk of renal toxicity.

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

Oral use.

Administer 0.1 mg firocoxib per kg bodyweight, once daily. Duration of treatment will be dependent on the response observed, but should not exceed 14 days.

To administer EQUIOXX at the dose of 0.1 mg firocoxib/kg, set the syringe plunger to the appropriate dose division for the horse's weight. Each full dose division on the syringe plunger delivers sufficient firocoxib to treat 100 kg body weight. The contents of one syringe will treat horses weighing up to 600 kg. To ensure correct dosage, bodyweight should be determined as accurately as possible to avoid overdosing.

To deliver firocoxib at the appropriate dosage, unlock the knurled ring on the syringe plunger by rotating it  $\frac{1}{4}$  turn and slide it along the plunger shaft to the appropriate dose division for the horse's weight. Rotate the plunger ring  $\frac{1}{4}$  turn to lock it in place and ensure it is locked.

Make sure the horse's mouth contains no feed. Remove the cover from the tip of the syringe. Insert the syringe tip into the horse's mouth at the interdental space and deposit the paste on the base of the tongue.

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

Lesions (erosion/ulceration) of the oral mucosa and of the skin around the mouth may occasionally be observed in treated animals when administered the recommended treatment dose. Typically, these lesions are mild and resolve without treatment, but oral lesions may be associated with salivation and labial and tongue oedema. The incidence of oral/skin lesions increases with increasing dose.

At high dosages and prolonged treatment (3 times the recommended dose for 42 consecutive days and 2.5 times the recommended dose for 92 consecutive days administered once daily) mild to moderate renal lesions were observed. If clinical signs occur, treatment should be discontinued and symptomatic treatment initiated.

#### **4.11 Withdrawal period(s)**

Meat and offal: 26 days.

Not authorized for use in animals producing milk for human consumption.

### **5. PHARMACOLOGICAL PROPERTIES**

Pharmacotherapeutic group: Anti-inflammatory and anti-rheumatic products, non-steroids, ATC vetcode: QM01AH90.

#### **5.1 Pharmacodynamic properties**

Firocoxib is a non-steroidal anti-inflammatory drug (NSAID) belonging to the Coxib group, which acts by selective inhibition of cyclooxygenase-2 (COX-2)-mediated prostaglandin synthesis.

Cyclooxygenase is responsible for generation of prostaglandins. COX-2 is the isoform of the enzyme that has been shown to be induced by pro-inflammatory stimuli and has been postulated to be primarily responsible for the synthesis of prostanoid mediators of pain, inflammation, and fever.

Coxibs therefore display analgesic, anti-inflammatory, and antipyretic properties. COX-2 is also thought to be involved in ovulation, implantation and closure of the ductus arteriosus, and central nervous system functions (fever induction, pain perception, and cognitive function). "In *in vitro*" equine whole blood assays, firocoxib exhibits 222 to 643 fold selectivity for COX-2 over COX-1. The concentration of firocoxib required to inhibit 50% of the COX-2 enzyme (i.e., the IC<sub>50</sub>) is 0.0369 to 0.12 µM, whereas the IC<sub>50</sub> for COX-1 is 20.14 to 33.1 µM.

#### **5.2 Pharmacokinetic particulars**

Following oral administration in horses at the recommended dose of 0.1 mg per kg of bodyweight, firocoxib is rapidly absorbed, and the time to maximal concentration (T<sub>max</sub>) is 3.9 ( $\pm$  4.4) hours. The peak concentration (C<sub>max</sub>) is 0.075 ( $\pm$  0.033) µg/ml (equivalent to approximately 0.223 µM), area under the curve (AUC<sub>0-24</sub>) is 0.96 ( $\pm$  0.26) µg x hr/ml, and oral bioavailability is 79 ( $\pm$  31) percent. The elimination half-life (t<sub>½</sub>) after a single dose is 29.6 ( $\pm$  7.5) hours and 50.6 hours after 14 days of dosing. Firocoxib is approximately 97% bound to plasma proteins. Following multiple oral administrations, the steady state is reached by approximately the eighth daily dose. Firocoxib is metabolised predominantly by dealkylation and glucuronidation in the liver. Elimination is principally in the excreta (primarily the urine), with some biliary excretion also observed.

### **6. PHARMACEUTICAL PARTICULARS**

#### **6.1 List of excipients**

Titanium dioxide (E 171)Glycerol triacetate  
Silica, colloidal anhydrous

Magnesium carbonate, heavy Macrogol300

## **6.2 Major incompatibilities**

Not applicable.

## **6.3 Shelf life**

Shelf life of the veterinary medicinal product as packaged for sale: 3 years.  
Shelf life after first opening the syringe: 3 months.

## **6.4 Special precautions for storage**

Replace cap after use.

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

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

Pre-filled oral syringe made of polypropylene, with a polyethylene cap, a rubber rod tip, and a polypropylene plunger rod.

Each syringe contains a net weight of 7.32 g of oral paste and is labelled in 100 kg

dosing increments. The oral paste is available in the following pack sizes:

- 1 carton box containing 1 syringe
- 1 carton box containing 7 syringes
- 1 carton box containing 14 syringes
  
- Not all pack sizes may be marketed.

## **6.6 Special precautions for the disposal of unused veterinary medicinal products or wastematerials 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**

AUDEVARD  
37-39 rue de Neuilly  
92110, Clichy  
France

## **8. MARKETING AUTHORISATION NUMBER**

Vm 44684/5002

**9. DATE OF FIRST AUTHORISATION**

25 June 2008

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

March 2022

Detailed information on this veterinary medicinal product is available on the website of the European Medicines Agency <http://www.ema.europa.eu/>

Approved 04 March 2022

A handwritten signature consisting of a stylized, cursive 'H' followed by the name 'Hunter.' written in a similar script.