SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Firodyl 62.5 mg Chewable Tablets for Dogs

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each tablet contains:
Active substance:
Firocoxib 62.5 mg

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

3. PHARMACEUTICAL FORM

Chewable tablet
Round clover shaped tablet, Beige to light brown. Double scored on one side.
The tablets can be divided into equal quarters.

4. CLINICAL PARTICULARS

4.1 Target species

Dogs

4.2 Indications for use, specifying the target species

For the relief of pain and inflammation associated with osteoarthritis in dogs.
For the relief of post-operative pain and inflammation associated with soft-tissue, orthopaedic and dental surgery in dogs.

4.3 Contraindications

Do not use in pregnant or lactating bitches.
Do not use in animals less than 10 weeks of age or less than 3 kg body weight.
Do not use in animals suffering from gastrointestinal bleeding, blood dyscrasia or haemorrhagic disorders.
Do not use concomitantly with corticosteroids or other non-steroidal anti-inflammatory drugs (NSAIDs).
Do not use in known cases 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
As the tablets are flavoured, they should be stored in a safe place out of the reach of animals.
The recommended dose, as indicated in the dosing table, should not be exceeded.
Use in very young animals, or animals with suspected or confirmed impairment of renal, cardiac or hepatic function may involve additional risk. If such use cannot be avoided, those dogs require careful veterinary monitoring.
Avoid use in any dehydrated, hypovolaemic or hypotensive animals, as there is a potential risk of increased renal toxicity. Concurrent administration of potentially nephrotoxic drugs should be avoided.
Use this product under strict veterinary monitoring where there is a risk of gastrointestinal bleeding, or if the animal previously displayed intolerance to NSAIDs.
Renal and/or hepatic disorders have been reported in very rare cases in dogs administered the recommended treatment dose. It is possible that a proportion of such cases had sub-clinical renal or hepatic disease prior to the commencement of therapy. Therefore, appropriate laboratory testing to establish baseline renal or hepatic biochemistry parameters is recommended prior to and periodically during administration.
The treatment should be discontinued if any of these signs are observed: repeated diarrhoea, vomiting, faecal occult blood, sudden weight loss, anorexia, lethargy, degradation of renal or hepatic biochemistry parameters.

Special precautions to be taken by the person administering the veterinary medicinal product to animals
This product may be harmful following accidental ingestion.
In order to prevent children from accessing the product, tablets should be administered and stored out of sight and reach of children. Halved or quartered tablets should be returned to the open blister pocket and inserted into the outer carton.
Laboratory studies in rats and rabbits have shown evidence that firocoxib has the potential to effect reproduction and to induce malformations in foetuses. Pregnant women or women who are intending to become pregnant should administer the product with caution.
Wash hands after use of the product.
In the event of accidental ingestion of one or more tablets, seek medical advice immediately and show the package leaflet or the label to the doctor.

4.6 Adverse reactions (frequency and seriousness)*

Emesis and diarrhoea have occasionally been reported. These reactions are generally of a transitory nature and are reversible when the treatment is stopped. Renal and/or hepatic disorders have been reported in very rare cases in dogs administered the recommended treatment dose. Rarely, nervous system disorders have been reported in treated dogs.

If adverse reactions like vomiting, repeated diarrhoea, faecal occult blood, sudden weight loss, anorexia, lethargy, degradation of renal or hepatic biochemistry parameters occur, use of the product should be stopped and the advice of a veterinarian should be sought. As with other NSAIDs, serious adverse effects can occur and, in very rare cases, may be fatal.

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 treated, including isolated reports).

4.7 Use during pregnancy, lactation or lay

Do not use in pregnant or lactating bitches.
Laboratory studies in rabbits have shown evidence of maternotoxic and foetotoxic effects at dose rates approximating the recommended treatment dose for the dog.

4.8 Interaction with other medicinal products and other forms of interaction

Pre-treatment with other anti-inflammatory substances may result in additional or increased adverse effects and accordingly a treatment-free period with such drugs should be observed for at least 24 hours before the commencement of treatment with the product. The treatment-free period, however, should take into account the pharmacokinetic properties of the products used previously.
The product must not be administered in conjunction with other NSAIDs or glucocorticosteroids. Gastrointestinal tract ulceration may be exacerbated by corticosteroids in animals given non-steroidal anti-inflammatory drugs.

Concomitant treatment with molecules displaying action on renal flow, e.g. diuretics or Angiotensin Converting Enzyme (ACE) inhibitors, should be subject to clinical monitoring. Concurrent administration of potentially nephrotoxic drugs should be avoided as there might be an increased risk of renal toxicity. As anaesthetic drugs may affect renal perfusion, the use of parenteral fluid therapy during surgery should be considered to decrease potential renal complications when using NSAIDs peri-operatively.
Concurrent use of other active substances that have a high degree of protein binding may compete with firocoxib for binding and thus lead to toxic effects.

4.9 Amounts to be administered and administration route

Oral use.

Osteoarthritis:
5mg firocoxib/kg bw once daily, as presented in the table below.
Duration of treatment will be dependent on the response observed. As field studies were limited to 90 days, longer-term treatment should be considered carefully and regular monitoring undertaken by the veterinarian.

Relief of post-operative pain:
5mg firocoxib/kg bw once daily as presented in the table below for up to 3 days as needed, starting approximately 2 hours prior to surgery. Following orthopedic surgery and depending on the response observed, treatment using the same daily dosing schedule may be continued after the first 3 days, upon judgment of the attending veterinarian.

Bodyweight (kg)	Number of tablets		Dose range (mg/kg BW)
	62.5 mg	250 mg	
3.1	0.25		5.0
3.2-6.2	0.5		5.0-9.8
6.3-9.3	0.75		5.0-7.4
9.4-12.5	1	0.25	5.0-6.6
12.6-15.5	1.25		5.0-6.2
15.6-18.5	1.5		5.1-6.0
18.6-21.5	1.75		5.1-5.9
21.6-25		0.5	5.0-5.8
25.1-37.5		0.75	5.0-7.5
37.6-50		1	5.0-6.6
50.1-62.5		1.25	5.0-6.2
62.6-75		1.5	5.0-6.0
75.1-87.5		1.75	5.0-5.8
87.6-100		2	5.0-5.7

The tablets are palatable, i.e. they are usually taken voluntarily by dogs (voluntary consumption of 76% of occasions in animals studied). If not, they can be given directly in the dog's mouth.
Tablets can be administered with or without food.
Instruction on how to divide the tablet: Put the tablet on an even surface, with its scored side facing down (convex face up). With the tip of the forefinger, exert slight vertical pressure on the middle of the tablet to break it along its width into halves. Then, in order to obtain quarters, exert slight pressure on the middle of one half with the forefinger to break it into two parts.

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

In dogs ten weeks of age at the start of treatment at dose rates equal or greater to 25 mg/kg/day (5 times the recommended dose) for three months, the following signs of toxicity were observed: body weight loss, poor appetite, changes in the liver (accumulation of lipid), brain (vacuolization), duodenum (ulcers) and death. At dose rates equal or greater to 15 mg/kg/day (3 times the recommended dose) for six months, similar clinical signs were observed, albeit that the severity and frequency were less and duodenal ulcers were absent.
In those target animal safety studies, clinical signs of toxicity were reversible in some dogs following cessation of therapy.
In dogs seven months of age at the start of treatment at dose rates greater than or equal to 25 mg/kg/day (5 times the recommended dose) for six months, gastrointestinal adverse effects, i.e. vomiting were observed.

Overdose studies were not conducted in animals over 14 months of age.
If clinical signs of overdosing are observed, discontinue treatment.

4.11 Withdrawal period(s)

Not applicable.

5. PHARMACOLOGICAL PROPERTIES

Pharmacotherapeutic group: Anti-inflammatory and anti-rheumatic products, non-steroids.
ATC vet code: 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* canine whole blood assays, firocoxib exhibits approximately 380-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_{50}) is 0.16 (± 0.05) µM, whereas the IC_{50} for COX-1 is 56 (± 7) µM.

5.2 Pharmacokinetic particulars

Following oral administration in dogs at the recommended dose of 5 mg per kg of bodyweight, firocoxib is rapidly absorbed and the time to maximal concentration (T_{max}) is 4.09 (± 5.34) hours. The peak concentration (C_{max}) is 0.80 (± 0.42) µg/ml (equivalent to approximately 1.5 µM), plasma concentrations-time can exhibit a bimodal distribution with a potential entero-hepatic cycle, area under the curve ($AUC_{t\text{-}last}$) is 10.24 (±3.41) µg x hr/ml, and oral bioavailability is 36.9 (± 20.4) percent. The terminal half-life ($t_{½}$) is 6.77 (± 2.79) hours (harmonic mean 5.90 h). Firocoxib is approximately 96 % bound to plasma proteins. Following multiple oral administrations, the steady state is reached by the third daily dose.
Firocoxib is metabolised predominantly by dealkylation and glucuronidation in the liver. Elimination is principally in the bile and gastrointestinal tract.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Hydroxypropylcellulose
Croscarmellose sodium
Microcrystalline Cellulose
Silica, colloidal anhydrous
Lactose monohydrate
Magnesium stearate
Yeast
Chicken flavour

6.2 Major incompatibilities

Not applicable.

6.3 Shelf life

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

6.4 Special precautions for storage

This veterinary medicinal product does not require any special storage conditions. Any part-used tablet should be returned to the opened blister and used within 4 days.

6.5 Nature and composition of immediate packaging

Aluminium / Polyvinyl chloride - Aluminium - Polyamide blister containing 12 tablets. Cardboard box with 12, 36, 96 tablets.

Not all pack sizes may be marketed.

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

Ceva Animal Health Ltd
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Wooburn Green
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8. MARKETING AUTHORISATION NUMBER

Vm 15052/4155

9. DATE OF FIRST AUTHORISATION

02 January 2020

10. DATE OF REVISION OF THE TEXT

September 2022

Approved 27 September 2022