Firocoxib

Previcox® is another name for this medication.

How Is This Medication Useful?

- Firocoxib is labeled for the control of pain and inflammation associated with osteoarthritis in dogs and horses
- Firocoxib is indicated for the control of post-operative pain and inflammation associated with orthopedic surgery.
- Like other NSAIDs (Non-Steroidal Anti-Inflammatories), firocoxib can be useful for treating fever, pain and/or inflammation associated with other conditions, post-surgery, trauma, etc.
- In dogs with transitional cell carcinoma, firocoxib had anti-tumor effects and significantly enhanced the antitumor activity of cisplatin. It is finding a role in treating cancer in animals.
- Firocoxib is a coxib-class NSAID. It is believed to predominantly inhibit COX-2 and spare COX-1 at therapeutic dosages. This theoretically would inhibit pain and inflammation (COX-2) and spare side effects on gastrointestinal, platelet and renal function (COX-1). However, COX-1 and COX-2 inhibition studies are done in vitro and do not necessarily correlate perfectly with clinical effects seen in actual patients.

Are There Conditions or Times When Its Use Might Cause More Harm Than Good?

- Firocoxib is metabolized by the liver and eliminated via the gallbladder in the feces. Dose may need to be reduced in patients with liver disease.
- Animals with stomach ulcers or bowel disorders should not take firocoxib.
- Firocoxib should not be given to animals allergic to it or other similar NSAIDs.
- Firocoxib should be used with caution and enhanced monitoring in patients with kidney, liver or heart disease, and those that are dehydrated, have low blood pressure or are taking diuretics.
- The product label says that 57mg firocoxib tablets cannot be accurately dosed in dogs weighing less than 12.5 pounds.
- Labeling in the UK states that firocoxib should not be used in dogs less than 10 weeks of age.
- Other anti-inflammatory drugs similar to deracoxib have caused birth defects in humans and animals.
- If your animal has any of the above conditions, talk to your veterinarian about the potential risks of using the medication versus the benefits that it might have.

What Side Effects Can Be Seen With Its Use?

- Firocoxib is tolerated well by most dogs, but may cause vomiting or poor appetite in some animals. If either occurs, the medication should be stopped and side effects reported to your veterinarian as soon as possible.
- Adverse effects reported to the FDA include increases in kidney values on bloodwork, depression/lethargy, elevated liver enzymes on bloodwork, and diarrhea.
- Animals that take firocoxib should have bloodwork before they start taking the drug, and at least twice yearly as long as they continue to take the drug.

How Should It Be Given?

- The successful outcome of your animal's treatment with this medication depends upon your commitment and ability to administer it exactly as the veterinarian has prescribed. If you have difficulty giving doses consult your veterinarian or pharmacist who can offer administration techniques or change the dosage form to a type of medication that may be more acceptable to you and your animal.

- If you miss a dose of this medication you should give it as soon as you remember it, but if it is within a few hours of the regularly scheduled dose, wait and give it at the regular time. Do not double a dose as this can be toxic to your pet.

- Some other drugs can interact with this medication so tell your veterinarian about any drugs or foods that you currently give your animal. Do not give new foods or medications without first asking your veterinarian. Drug interactions in people taking NSAIDs that might be of significance in veterinary patients taking firocoxib include:
    - ***ACE inhibitors*** (e.g., enalapril, benazepril): Some NSAIDs reduce effects on blood pressure.
    - ***NSAIDs*** and ***corticosteroids***: see comments below.
    - ***Fluconazole***: may increase plasma levels of firocoxib in dogs.
    - ***furosemide***: NSAIDs may reduce the diuretic effects, and increase likelihood of kidney toxicity.
    - ***Highly Protein Bound Drugs*** (phenytoin, valproic acid, oral anticoagulants, other antiinflammatory agents, aspirin, sulfonamides, sulfonylurea antidiabetic agents): firocoxib is also highly protein bound, so it may increase serum levels, duration of actions and toxicity of these drugs.
    - ***methotrexate***: Serious toxicity has occurred when NSAIDs have been used concomitantly with methotrexate; use together with extreme caution.
    - ***Nephrotoxic Drugs*** (furosemide, aminoglycosides, amphotericin B, etc.): firocoxib may enhance the risk of nephrotoxicity.

- Firocoxib and other NSAIDs should not be given at the same time as cortisone type drugs such as prednisone, dexamethasone, triamcinolone or DepoMedrol®. Giving these drugs together can cause severe side effects, including ulceration and bleeding of the stomach and small intestines, and kidney failure.
- Dogs usually receive firocoxib orally once daily with food. Cats do not usually receive firocoxib.
- If changing from one COX2 selective NSAID to another, the last dose of a medication should be given, one day with no medication should be allowed to pass, and the next NSAIDS may be started on the next day.
- If changing from a non-selective NSAID (COX1 and COX2 inhibitor) to another NSAID, a longer wash-out period of 3-4 days is recommended.
- Two different NSAIDs should never be given on the same day. Drugs in this category often used in veterinary medicine include aspirin, piroxicam, carprofen, meloxicam, deracoxib, robenacoxib, etc.

What Other Information Is Important About This Medication?

- Firocoxib should be stored in a tight, light resistant, childproof container away from all children and other household pets.
- Be careful to keep chewable tablets out of the reach of your pets. Ingesting an entire bottle of this drug could be very toxic to your dog, and potentially fatal. In case of overdose, call your emergency veterinarian immediately.
- Firocoxib can be given with or without food. Giving with food will reduce GI side effects, and will delay but not affects the amount of drug absorbed. Peak drug levels occur 1 hour after administration if given on an empty stomach, and 5 hours after if a patient is fed.

References:

Plumb Veterinary Drug Handbook, 2015.