

ROBENACOXIB

BRAND NAME: ONSIOR

AVAILABLE IN
6 mg TABLETS for Cats
and
10 mg, 20 mg and 40 mg
TABLETS for Dogs

BACKGROUND

Robenacoxib is a member of the "coxib" class of non-steroidal anti-inflammatory pain relievers (NSAIDs). It is used to relieve pain associated with inflammation and is approved for three days of use in association with surgical procedures in dogs and cats. There are some special safety features for robenacoxib that are not shared by other NSAIDs which have made this product particularly of interest for feline use. (This product was first approved for cats; the canine approval came later).

Feline pain relief has long been problematic with medications either being overly sedating, ineffective, or toxic. There has been a revolution in pain relievers for dogs since the mid-1990's but the cat has been somewhat left behind and, to this day, an approved anti-inflammatory pain reliever for long term feline use is still unavailable. That said, robenacoxib, while approved for only three days of use (six days in the U.K.), it is commonly used longer term at reduced dosages with good results.

As mentioned, robenacoxib is an NSAID (non-steroidal anti-inflammatory drug) of the coxib class. Other members of the coxib class with which one might be familiar are Celebrex® (celecoxib - for humans), Vioxx (rofecoxib - for humans), and Deramaxx (deracoxib - for dogs). What makes this class of NSAID special is its preferential suppression of an enzyme called "COX-2" (cyclo-oxygenase 2).

Inflammatory biochemicals responsible for the pain and inflammation we want to alleviate are produced by COX-2. One of the goals in pain relief is to inhibit COX-2 without inhibiting its counterpart COX -1."

Cyclo-oxygenase 1, abbreviated COX-1, is what is called a "constitutive" enzyme. This means it is involved in producing regulatory biochemicals (called "prostaglandins") which are important in maintaining the normal health and function of our bodies. We want to leave this enzyme alone. COX-2 is induced in times of inflammation and mostly produces inflammatory biochemicals. We would like to suppress this and curtail the painful inflammatory process.

In the past, NSAIDs could not distinguish the COX enzymes; they inhibited them both. With the development of "COX preferential" and "COX selective" NSAIDs, we can inhibit COX-2 and leave COX-1 alone. The introduction of COX-2 preferential NSAIDs has reduced stomach and intestinal side effects by 50% in humans and has made FDA approval of certain NSAIDs possible for pets. The coxib class of NSAIDs is COX selective.

Robenacoxib actually concentrates at the site of inflammation rather than simply circulating in the bloodstream. This mechanism affords an extra safety measure because the drug is sequestered away from healthy organs where its effects are not needed and focused on damaged tissues where it is needed.

HOW THIS MEDICATION IS USED

This medication is approved for three days of consecutive use in dogs and cats. The patient, be it dog or cat, must be at least 4 months old and must weigh at least 5.5 lbs. If use other than what is approved on the official label is considered, monitoring blood tests as well as pre-treatment blood tests should be evaluated.

Robenacoxib may be given with or without food. It works a little faster if given without food but if there is an upset stomach concern, giving the medication with food can prevent this side effect.

If a dose is accidentally skipped, do not double up on the next dose. Simply give the medication when it is remembered or pick up with the next dose, allowing at least the proper interval between doses according to the label instructions.

Robenacoxib should be kept away from light and stored at room temperature. Do not refrigerate.

SIDE EFFECTS

Drug side effects are classified into two types: common and severe. For robenacoxib, the only common side effects one might likely see is soft stool, possibly vomiting. These symptoms resolve with discontinuation of the drug and can be mitigated by giving robenacoxib with food.

Severe side effects are not common but you should be aware of them because the consequences are high if they come up. The side effects of concern are the same with all NSAIDs regardless of their COX selectivity: stomach ulceration, loss of kidney function, and inappropriate bleeding. COX-preferential and COX selective NSAIDs were developed to address these very concerns; however, even these newer generations of NSAIDs should not be used frivolously.

- If a patient has borderline kidney function, NSAIDs should be used with caution (modified dose, monitoring blood tests etc.) as they reduce blood flow through the kidneys. It is also important that NSAIDs not be given to dehydrated patients because of this potential side effect.
- NSAIDs are broken down (metabolized) in the body by the liver. If the patient's liver is not working normally due to another disease or if the patient is taking other drugs that are also removed by the liver, it is possible to "over work" the liver and exacerbate pre-existing liver disease. If there is any question about a patient's liver function, another class of pain reliever should be selected.

In any of these situations, the patient will be clearly sick with poor appetite, listlessness, possibly yellow coloration in the eyes/gums, vomiting or diarrhea that does not resolve quickly with discontinuation of the drug. If your pet seems ill on robenacoxib, report this to your veterinarian promptly.

INTERACTIONS WITH OTHER DRUGS

Drugs of the NSAID class should not be used concurrently as the potential for the aforementioned side effects increases. For similar reasons, NSAIDs should not be used in conjunction with corticosteroid hormones such as prednisone, dexamethasone, etc.

ACE inhibitors such as enalapril may not be as effective in the presence of NSAIDs. (ACE inhibitors are used in the treatment of hypertension or heart failure.) This is because ACE inhibitors depend on the dilation of blood vessels in the kidneys and such dilation can be interfered with by NSAIDs).

Concurrent use of robenacoxib with methotrexate, an agent of cancer chemotherapy, can increase the toxicity of the methotrexate significantly.

Robenacoxib should not be used in conjunction with drugs that may be potentially harmful to the kidneys. Similarly, use of diuretics (medications that increase urine production), can create dehydration and the state of dehydration increases the potential of robenacoxib to damage the kidneys.

Robenacoxib is strongly bound to blood proteins and may displace other protein-bound drugs. This means that such other drugs will be present in their active forms in higher amounts than expected. Toxicity could result.

CONCERNS AND CAUTIONS

Do not crush or break the tablets

Robenacoxib has not been tested in pregnant or nursing females and thus is not recommended for use in such individuals, particularly since COX-2 is important in reproductive function. This also means that pregnant women might do well not handling this medication.

NSAIDs should not be used in animals with pre-existing liver or kidney disease.

Cats metabolize many NSAIDs at a much lower rate, requiring significantly different dosages and dosing rates than dogs, and making some NSAIDs inappropriate for use in cats.

Robenacoxib should not be used in patients with pre-existing GI ulcerations.

The 3-pack of Onsior® contains six blisters but only three of them have pills. The other three blisters are empty. This has led to numerous complaints from people opening one of the empty chambers and assuming the whole packet is empty. In reality only the circular blisters have pills. (Apparently in Europe, a 6-pack is marketed and the packaging was modified only slightly to accommodate the U.S. label dose.) Do not be confused by the empty blisters.



Front of blister pack.
Only three of the six blisters contain pills



Back of blister pack.
Arrow points to one of the three round blisters with pills inside

