

Ketoconazole – Oral

What is ketoconazole?

Ketoconazole (brand name: Nizoral®) is an antifungal medication used to treat fungal infections. Because this drug affects how some other drugs are metabolized, it has also been used to reduce the dosage of expensive drugs such as cyclosporine.

Its use in dogs, cats, other small mammals, and reptiles to treat fungal infections is '**off label**' or '**extra label**'. Many drugs are commonly prescribed for off label use in veterinary medicine. In these instances, follow your veterinarian's directions and cautions very carefully as their directions may be significantly different from those on the label.

How is ketoconazole given?

Ketoconazole is given by mouth in the form of a tablet. It should be given with food, and ideally with high fat foods such as cheese, butter, or cream cheese. This medication may also be compounded into an oral liquid. Follow the instructions on the label and measure doses carefully. This medication can take a few weeks before full effects are observed, but gradual improvements are usually noticed after a few days.

What if I miss giving my pet the medication?

If you miss a dose, give it when you remember, but if it is close to the time for the next dose, skip the dose you missed and give it at the next scheduled time, and return to the regular dosing schedule. Never give your pet two doses at once or give extra doses.

Are there any potential side effects?

The most common side effects of ketoconazole include lack of appetite, vomiting, diarrhea, and/or weight loss. Other side effects that may occur include liver toxicity, which may cause severe vomiting, lack of appetite, and a yellowing of the skin and gums. Your veterinarian may notice changes in your pet's bloodwork including the suppression of cortisol and testosterone levels. Rarely, low platelet counts have been reported, as well as a haircoat color change. Long-term use of this medication may be associated with cataract formation.

This moderate-acting medication should stop working in a few days, although effects can be longer in pets with liver or kidney disease.

Are there any risk factors for this medication?

Ketoconazole should not be used in patients that are allergic to it. Due to its toxic side effects in cats and the availability of safer options, use in cats is generally not recommended. It should be used cautiously in pets with liver disease, low platelet counts, or those that are undergoing stressful events such as serious illness, surgery, or trauma. Ketoconazole should not be used in pregnant pets unless it is used for a life-threatening infection. It should be used cautiously in breeding pets as it can cause temporary infertility, and it should also be used cautiously in nursing pets as the medication is excreted in milk.

Are there any drug interactions I should be aware of?

The following medications should be used with caution when given with ketoconazole: antacids, antiarrhythmics, tricyclic antidepressants, benzodiazepines, buspirone, busulfan, calcium-channel blocking agents, ciprofloxacin, cisapride, colchicine, corticosteroids, cyclophosphamide, cyclosporine, digoxin, doxorubicin, fentanyl/alfentanil, fluoxetine, H2 blockers, hepatotoxic drugs, isoniazid, ivermectin, macrolide antibiotics, methadone, mitotane, midazolam, ondansetron, phenytoin, praziquantel, proton-pump inhibitors, rifampin, sildenafil, sucralfate, sulfonyleurea antidiabetic agents, theophylline, tramadol, trazodone, vincristine/vinblastine, and warfarin.

Be sure to tell your veterinarian about any medications (**including vitamins, supplements, or herbal therapies**) that your pet is taking.

Is there any monitoring that needs to be done with this medication?

A complete blood count with a focus on platelets should be monitored while using ketoconazole. When using this medication long-term, liver enzymes should be monitored every 2–3 months for the first 6 months, and then twice yearly thereafter. Your pet should be monitored for side effects, paying special attention to signs of low cortisol levels. Your veterinarian may monitor your pet to be sure that the medication is working.

How do I store ketoconazole?

This medication should be stored at room temperature in a dry place protected from moisture.

What should I do in case of emergency?

If you suspect an overdose or an adverse reaction to the medication, call your veterinary office immediately. If they are not available, follow their directions in contacting an emergency facility.

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