Ivermectin

Heartgard®, Eqvalan®, Zimectrin®, Ivomec®, UltraMectin®, and Equimectin® are other names for this medication.

How Is This Medication Useful?
- Ivermectin is an anti-parasite drug that is used to treat many different parasites in various species. It is used to treat and prevent blood (e.g., heartworm) and lung parasites, intestinal parasites and various kinds of mites including those that cause mange and ear mites.

Are There Conditions or Times When Its Use Might Cause More Harm Than Good?
- At doses higher than those used for heartworm prevention (greater than 6mcg/kg body weight monthly) ivermectin crosses into the brain of Collies and some other herding breeds where it can cause severe damage including coma and death. Even at heartworm prevention doses, the manufacturer recommends that Collies and Collie-crosses be observed for 8 hours for any adverse effects. If your Collie or Collie-cross exhibits signs of weakness, clumsiness, dilated pupils, trembling or pressing its head against the wall, you should take it to a veterinary clinic immediately.
- Ivermectin will kill many kinds of turtles and should not be used in this species.
- Ivermectin is also dangerous to some species of birds and should only be used in birds under the direct guidance of a veterinarian experienced in treating birds.
- Ivermectin in considered safe for use in pregnancy.
- Ivermectin should not be used in dairy animals.
- Ivermectin is generally very safe in cats, however, some veterinarians do not recommend using ivermectin at doses higher than heartworm prevention (24mcg/kg/month) in cats younger than one year due to the increased risk of neurological toxicity.
- 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?
- When the parasites begin to die off in an animal treated with ivermectin, the animal can experience swelling, irritation and pain at the sites where the parasites are located. Dogs being treated with ivermectin to kill heartworm larvae (immature heartworms) can experience a shock-like reaction if there are large numbers of the larvae being killed at once.
- At higher doses any animal can experience nerve and brain toxicity. If your animal shows any signs of of weakness, clumsiness, dilated pupils, trembling or pressing its head against the wall, after being treated with ivermectin you should take it to a veterinary clinic immediately.
- Some animals may experience pain and swelling at the injection site. Limiting the injection to no more than 10ml will help reduce the likelihood of this effect.
- Topical use of ivermectin for ear mites in cats may cause pain and vomiting in a small number of cats.

How Should It Be Given?
- Ivermectin can be given orally as a tablets, chewable treats, oral liquids, oral pastes, and oral drenches. It may be given injectably and may also be administered as a topical solution for mites.
- If given for heartworm prevention, the animal should be tested for heartworm disease prior to giving the drug. It is then given once a month. If switching from the once daily heartworm medication (diethylcarbamazine) then you should begin ivermectin within 30 days of stopping the once daily medication.
- Ivermectin should only be given exactly as labeled on the container or as your veterinarian has prescribed.

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How Should It Be Given? (continued from previous page)

- 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. Please do not skip doses or stop giving the medication. 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.
- If you overdose your pet you may see signs of staggering, vomiting, diarrhea, depression, or dilated pupils in dogs. You may see agitation, vocalization, loss of appetite, dilation of pupils, staggering, tremors, blindness, head-pressing, wall-climbing, and disorientation in cats. Most recover in 2-4 weeks with supportive care, but you should take your pet to a veterinary clinic immediately if you observe these symptoms in your dog or cat.
- If you miss more than 8 weeks in a row of ivermectin when using for heartworm prevention, you should start giving the drug as soon as you remember to. But you should have your pet tested for heartworms within 6 months as your pet may have become infected with heartworms during the time you did not give the drug.
- 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.

- **Dogs and Cats**: Dogs and cats receive ivermectin orally once monthly for heartworm prevention, orally daily for certain types of mange and topically for ear mites as a single treatment that may be repeated several weeks later. You should read the labels supplied on your prescription of ivermectin very carefully and observe all instructions.
- **Horses**: Horses usually receive ivermectin orally as a paste or by stomach tube as a single dose to remove intestinal parasites.

What Other Information Is Important About This Medication?

- Ivermectin should be stored in a tight, light resistant, childproof container away from all children and other household pets.
- Ivermectin should be disposed of properly as it is very toxic to fish, turtles and other wildlife.