

Levobunolol, Ophthalmic

(lee-voe-byoon-uh-lol)

Category: Anti-glaucoma Agent

Other Names for this Medication: Betagan®

Common Dosage Forms: Veterinary: None. **Human:** 0.25% & 0.5% ophthalmic solutions in 5 mL, 10 mL, & 15 mL dropper bottles.

This information sheet does not contain all available information for this medication. It is to help answer commonly asked questions and help you give the medication safely and effectively to your animal. If you have other questions or need more information about this medication, contact your veterinarian or pharmacist.

Key Information

- ▶ Usually used twice daily for glaucoma.
- ▶ Use proper administration techniques to avoid contamination of the medication. Keep cap tightly closed when not in use.
- ▶ Wait 5 minutes after applying this medication before applying any other medications to the eye.
- ▶ Store at room temperature away from moisture and sunlight; do not freeze. Do not use if the color changes, if it becomes cloudy, or if particles are seen in solutions.

How is this medication useful?

Levobunolol is used to treat glaucoma and prevent the onset of glaucoma in the normal eye of dogs with glaucoma in one eye. It works by increasing the flow of natural eye fluids out of the eye to decrease pressure inside of the eye. The FDA (U.S. Food & Drug Administration) has approved this drug for use in humans but not for animals. The FDA allows veterinarians to prescribe products containing this drug in different species or for other conditions in certain situations. You and your veterinarian can discuss why this drug is the most appropriate choice.

What should I tell my veterinarian to see if this medication can be safely given?

Many things might affect how well this drug will work in your animal. Be sure to discuss the following with your veterinarian so together you can make the best treatment decisions.

- ▶ Other drugs can interact with this medication, so be sure to tell your veterinarian and pharmacist what medications (including other eye medications, vitamins, supplements, or herbal therapies) you give your animal, including the amount and time you give each.
- ▶ Tell your veterinarian about any conditions or diseases your pet may have now or has had in the past.
- ▶ If your animal has been treated for the same disease or condition in the past, tell your veterinarian about the treatment and how well it did or didn't work.
- ▶ If your animal is pregnant or nursing, talk to your veterinarian about the risks of using this drug.
- ▶ Tell your veterinarian and pharmacist about any medication side effects (including allergic reactions, lack of appetite, diarrhea, itching, hair loss) your pet has developed in the past.

When should this medication not be used or be used very carefully?

No drug is 100% safe in all patients, but your veterinarian will discuss with you any specific concerns about using this drug in your animal.

This drug **SHOULD NOT** be used in patients:

- ▶ That are allergic to it or drugs like it.

This drug should be used **WITH CAUTION** in:

- ▶ Animals that have thyroid conditions, diabetes, asthma, or heart disease.
- ▶ Animals that are pregnant or nursing.
- ▶ Animals that are going to have surgery, including dental surgery.
- ▶ Animals receiving a similar drug (eg, atenolol, sotalol) by mouth.

If your animal matches any of these conditions, talk to your veterinarian about the potential risks of using the medication versus the benefits.

What are the side effects of this medication?

Side effects that usually are not serious include:

- ▶ Mild burning, stinging, irritation, or redness of the eyes.
- ▶ Humans using levobunolol experience headaches.
- ▶ Excess tearing.
- ▶ Dizziness.
- ▶ Restlessness.

If any of these signs are severe, worsen, or continue to be a problem, contact your veterinarian.

Side effects that may be serious or indicate a serious problem:

- ▶ Difficulty breathing or swelling of the throat may indicate a severe allergic reaction to this drug.

If you see any of these signs, contact your veterinarian immediately.

If my pet gets too much of this medication (an overdose), what should I do?

When used as an eye medication, overdoses of levobunolol are unlikely, but side effects or toxic effects could occur if your animal eats the medication. If this happens contact your veterinarian or an animal poison control center for further advice. Animal poison control centers that are open 24 hours a day include **ASPCA Animal Poison Control Center** (888-426-4435) and **Pet Poison HELPLINE** (855-764-7661); a consultation fee may be charged for these services.

How should this medication be given?

For this medication to work, give it exactly as your veterinarian has prescribed. It's a good idea to always check the prescription label to be sure you are giving the drug correctly.

- ▶ Administer this drug to your animal's eye in the exact amount that your veterinarian has prescribed.
- ▶ Wash your hands before administering this medication.
- ▶ Do not touch the dropper tip or allow it to touch your animal's eye or any other surface to prevent contamination.

- ▶ If any residue is left on your animal's face after giving the eye drops, gently wipe it off with a damp cloth or tissue.
- ▶ If you are administering more than one eye medication to your animal, wait 5 minutes between each medication before giving the next one. Use eye drops before eye ointments to allow the drops to absorb into the eye.
- ▶ If you are using this medication as an eye solution for your horse, your veterinarian may have implanted a special eye catheter (subpalpebral lavage or SPL catheter). Use this catheter exactly as your veterinarian has prescribed and only use air to flush the medications to the eye after injecting into the catheter.
- ▶ If you are having difficulty applying the medication or your animal does not accept the treatment, contact your veterinarian or pharmacist for tips to help with administration and reducing the stress of medication time.
- ▶ This medication can be given for various lengths of time. Be sure you understand how long your veterinarian wants you to continue giving this medication. Prescription refills may be necessary before the therapy will be complete. Before stopping this medication, talk to your veterinarian, as there may be important reasons to continue its use.

What should I do if I miss giving a dose of this 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. After that, return to the regular dosing schedule. Do not double-up or give extra doses.

How should I store this medication?

- ▶ Store this medication in the original prescription container at room temperature and protected from light.
- ▶ If your veterinarian or pharmacist has made (compounded) a special formulation for your animal, follow the storage recommendations and expiration date for the product.
- ▶ Keep away from children and other animals.

Can handling this medication be hazardous to me, my family, or other pets?

There are no specific precautions required when handling this medication unless you are allergic to it or other drugs like it (eg, timolol), but it is always a good idea to wash your hands after handling any medication.

How should I dispose of this medication if I don't use it all?

- ▶ Do not flush this medication down the toilet or wash it down the sink. If a community drug "take-back" program is available, use this option. If there is no take-back program, mix the drug with coffee grounds or cat litter (to make it undesirable to children and animals and unrecognizable to people who might go through your trash), place the mixture in a sealable plastic bag to keep it from leaking out, and throw the bag out with the regular trash.
- ▶ Do not save left over medication for future use or give it to others to use.

What other information is important for this medication?

- ▶ Use of this drug may not be allowed in certain animal competitions. Check rules and regulations before entering your animal in a competition while this medication is being administered.

If you have any other questions or concerns about this medication, contact your veterinarian or pharmacist.