Vincristine
(vin-kris-teen)

Description: Anticancer Agent

Other Names for this Medication: Oncovin®, Vincasar® PFS

Common Dosage Forms: Veterinary: None. Human: 1 mg/mL injection.

Key Information
- Vincristine is a chemotherapy (anticancer) drug. The drug can be hazardous to other animals and people that come in contact with it. On the day your animal gets the drug and then for a few days afterward, all bodily waste (urine, feces, litter), blood, or vomit should only be handled while wearing disposable gloves. Seal the waste and any items used to clean it (eg, paper towels, gloves) in a plastic bag and then place bag in another bag (double bag) before placing in with the regular trash.
- Vincristine can be more toxic to dog breeds that are positive for the MDR1 genetic mutation.
- Gastrointestinal effects (eg, vomiting, reduced appetite, diarrhea) common after a dose. If these signs become severe or bloody, contact your veterinarian.
- Can cause bone marrow suppression; if you notice bleeding, bruising, fever (indicating an infection), or if animal becomes tired easily, contact veterinarian immediately.
- Vincristine can cause a serious neurological toxicity that can result in weakness, severe constipation, and loss of appetite.
- Pregnant women SHOULD NOT handle any waste or items used to clean the waste while your animal is on this drug.

How is this medication useful?
Vincristine is an injectable chemotherapy drug used to treat a variety of cancers in humans and animals. It may also be used to treat a condition called immune-mediated thrombocytopenia (too few platelets). The FDA (U.S. Food & Drug Administration) has approved this drug for use in humans but it is not officially approved for use in 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.

- Tell your veterinarian and pharmacist what medications (including vitamins, supplements, or herbal therapies) you are giving your animal, as well as the amount and schedule of each.
- Tell your veterinarian about any conditions or diseases your animal may have now or has had in the past. **Vincristine should be used with caution in animals with liver disease.**
- 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 animal has developed in the past.

**How long until I will know if this medication is working, and how long will the effects of this medication last?**

This medication takes several days until beneficial effects occur. Full effects of this medication may not be evident for several weeks. However, side effects (eg, upset stomach or sleepiness) may occur right away. Improvement of clinical signs will be gradual over the time that it takes the medication to reach its full efficacy. The effects of this medication are moderate in duration, meaning they may last for a few days, although the benefits may be prolonged if your animal has decreased kidney and/or liver function.

**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. Generally, animals with liver or kidney problems should not receive vincristine but the benefits may outweigh risks if your animal has cancer.

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

- With severe liver disease, severe bone marrow suppression, or active bacterial infections.
- That have experienced a severe allergic reaction to it or vinblastine.

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

- Dog breeds that may have a certain genetic mutation (MDR1) until they are tested for this mutation. This mutation is most commonly found in “white feet” breeds, including collies, Australian shepherds, shelties, long-haired whippets. Dogs that have this mutation may be overly sensitive to the effects of this drug.
- Animals with urate urinary stones or history of urate stones.
- Animals with neuromuscular disease.
- Animals with bone marrow suppression or active infections.
- Animals with liver disease.

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

**What are the side effects of this medication?**

**Side effects include:**

- Nervous system damage (eg, weakness, numbness, constipation, loss of appetite). Cats may be at higher risk for nervous system damage. If your animal stops eating, is constipated, or has trouble walking, eating, or drinking, contact your veterinarian immediately.
- Vomiting, diarrhea, ulcers, and poor appetite. Vincristine alone does not usually cause much gastrointestinal toxicity, but it is often used with other drugs that do. If you see severe vomiting or bloody diarrhea, call your veterinarian immediately.
- Bone marrow suppression. Bone marrow suppression is not as likely following vincristine administration as with many other anticancer drugs, but if you see bleeding, bruising, fever (indicating an infection), or if your animal becomes tired easily, contact your veterinarian immediately.
- Skin and tissue damage at the injection site. If this drug leaks out of the vein while it is being given, it can cause severe damage to the skin and surrounding tissue. If you see swelling or redness in the area where this drug was given, contact your veterinarian immediately.
- Rare, but reported side effects in animals include: unexpected bleeding, liver damage, jaw pain, loss of hair/fur, mouth sores, seizures, and severe water retention (swelling of limbs). If any of these signs occur, contact your veterinarian immediately.

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

Your animal will not receive this drug outside of the veterinarian’s office. Watch for any adverse reactions when your animal arrives home after receiving this medicine.

**How should this medication be given?**

You will not be giving this medicine to your animal. Your veterinarian will give your animal this medicine at the clinic.
What should I do if I miss giving a dose of this medication?
You will not be administering this medication at home. It is important that you bring your animal to the veterinary clinic for each scheduled treatment. Contact your veterinarian if you are not able to make these appointments.

How should I store this medication?
You will not be taking this medication home.

Can handling this medication be hazardous to me, my family, or other animals?
▶ You will not be handling this medication, but for a few days after your animal receives it, this drug can be found in the animal’s saliva, urine, feces, and blood.
▶ This drug can cause serious adverse effects in people or animals that are exposed to it, disposable gloves should be worn to avoid contact with bare skin. Be careful not to accidentally rub your eyes. Wear gloves when disposing of cat litter or dog droppings or cleaning up urine spills or vomit. Do not reuse gloves. Seal the waste with all gloves and items used to clean it (eg, paper towels) in a plastic bag, then place into an additional plastic bag (double bag) before putting in the regular trash.
▶ Do not let treated animals lick human skin. If skin exposure occurs, the area should be washed thoroughly with soap and water. Contact your physician if you have any concerns.
▶ Pregnant women SHOULD NOT handle any waste or items used to clean the waste while your animal is on this drug.

How should I dispose of this medication if I don’t use it all?
This medicine is only given in your veterinarian’s office, so you will not need to dispose of it.

What other information is important for this medication?
▶ Your veterinarian will need to do periodic examinations and blood tests on your animal after it receives this medication. Do not miss these important follow-up visits.
▶ Your animal should not receive vaccines containing live (or modified live) viruses while receiving this medication.
▶ In the interest of safety to other animals and humans, do not take your dog to a dog park or allow your animal to urinate and defecate in public places until your veterinarian tells you that it is okay to do so.
▶ Your animal should not participate in animal competitions while on this drug. Exposure to other animals may put your animal at serious risk of infections during chemotherapy treatment. Talk with your veterinarian about when it is safe to return to these events.

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

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