

Procarbazine

(proe-kar-ba-zeen)

Category: Antineoplastic Agent

Other Names for this Medication: Matulane®

Common Dosage Forms: Veterinary: None. **Human:** 50 mg capsule. May be made (compounded) into a flavored-suspension.

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

- ▶ Procarbazine 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), blood, or vomit should only be handled while wearing disposable chemotherapy-resistant 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.
- ▶ Relatively well tolerated by most dogs and cats, but can cause vomiting, gastrointestinal (GI) upset (eg, diarrhea, etc), bone marrow depression, and liver toxicity.
- ▶ Procarbazine can also be toxic to the nerves and cause numbness, tingling, or lameness.

How is this medication useful?

Procarbazine is used to treat a variety of cancers in animals. It is used in a cancer treatment protocol called MOPP.

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.

- ▶ Other drugs can cause problems when taken with procarbazine, so be sure to tell your veterinarian and pharmacist what medications (including 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 have had a serious allergic reaction to procarbazine.

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

- ▶ Animals with bone marrow suppression (when the body cannot fight infections), anemia (low red blood cells), or with an active infection.
- ▶ That are receiving other central nervous system depressant drugs.
- ▶ That have severe kidney or liver problems.

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

What are the side effects of this medication?

Most dogs and cats tolerate the side effects of procarbazine, but they can occur, and include:

- ▶ Bone marrow suppression. The most severe effects on the bone marrow usually occur about 4 weeks after receiving procarbazine. Your veterinarian will do blood tests to watch for this, but if you see bleeding, bruising, fever (indicating an infection), or if your animal becomes tired easily, contact your veterinarian immediately.
- ▶ Gastrointestinal (GI) effects such as vomiting, reduced appetite, and diarrhea can occur. You don't have to be overly concerned if you see any of these unless they are severe, worsen, or continue to be a problem, then contact your veterinarian.
- ▶ Nerve damage. If your animal becomes lame or is unsteady when walking, contact your veterinarian immediately.

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

Overdoses of procarbazine can be fatal and even small overdoses should be considered an emergency. If you witness or suspect an overdose, immediately contact your veterinarian or an animal poison control center for further advice. Animal poison control centers that are open 24 hours a day include: **Pet Poison HELPLINE** (855-764-7661) and **ASPCA Animal Poison Control Center** (888-426-4435); a consultation fee is 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.

- ▶ Wear disposable chemotherapy-resistant gloves when administering this medication to your animal.

- ▶ Give this drug with food.
- ▶ Compounded liquid forms of this medication must be measured carefully. Your veterinarian or pharmacist can help by providing special measuring spoons or syringes.
- ▶ If you have difficulty getting your animal to take the medicine, contact your veterinarian or pharmacist for tips to help dosing and reducing the stress of medication time.
- ▶ This medication can be given for various lengths of time. Be sure you understand how long the 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?

This drug must be dosed very carefully. Contact your veterinarian for further instructions if you miss a dose.

How should I store this medication?

- ▶ Store this medication in the original prescription bottle or an approved dosage reminder container (ie, pill minder) at room temperature, 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?

- ▶ This drug can cause serious adverse effects in people or animals that are exposed to it, disposable chemotherapy-resistant gloves should be worn while handling this medication; avoid contact with bare skin, eyes, or mouth. 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?

- ▶ 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 leftover medication or give it to others.

What other information is important for this medication?

- ▶ Your veterinarian will need to perform follow up examinations and lab work 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 or concerns about this medication, contact your veterinarian or pharmacist.