

# Piperacillin/Tazobactam

(pip-er-uh-sill-in / taz-oh-bak-tam)

**Category:** Antibiotic

**Other Names for this Medication:** Zosyn®

**Common Dosage Forms: Veterinary:** None. **Human:** Piperacillin/tazobactam is available in a 1:0.125 fixed ratio of piperacillin to tazobactam; vial strength is listed as the total amount of drug in the combination: 2.25 g, 3.375 g, 4.5 g, 13.5 g, & 40.5 g vials for reconstitution.

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

- ▶ This medication cannot be given by mouth; it must be given by injection.
- ▶ Injectable solutions may cause stinging if given under the skin (SC, subcutaneous).

## How is this medication useful?

In dogs and cats, piperacillin/tazobactam is used to treat bacterial infections that have become resistant to other antibiotics.

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 interact with piperacillin/tazobactam, 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 are allergic to it or drugs like it (other penicillins).

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

- ▶ That have kidney damage.
- ▶ That have heart failure.
- ▶ That have elevated sodium (salt) levels in their blood.

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

## What are the side effects of this medication?

**Common, but not serious side effects include:**

- ▶ Diarrhea, vomiting, and loss of appetite.
- ▶ Stinging at the injection site.

You don't have to be overly concerned if you see any of these signs unless they are severe, worsen, or continue to be a problem. Contact your veterinarian if this happens.

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

- ▶ Complete loss of appetite in cats can sometimes cause severe liver problems.
- ▶ Fever, rashes, trouble breathing, and anemias may be signs of an allergic reaction.

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?

Overdoses of piperacillin/tazobactam can be serious and cause damage to the nervous system and liver as well as increase the risk of bleeding. If you witness or suspect an overdose, 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.

*By Injection:*

- ▶ Your veterinarian or pharmacist will give you all of the items you need to give the injections (shots); needles, syringes, diluent, alcohol swabs. If the medicine needs to be mixed before you give it, mix it exactly as your veterinarian or pharmacist instructs you.
- ▶ Use a new needle and new syringe to give each injection. Do not reuse needles and syringes.
- ▶ Because this drug must be injected, be sure you understand the proper dose, location(s), and method for giving the shots.
- ▶ It is very important to equalize the pressure in a vial of this drug when adding diluent. Your pharmacist or veterinarian will show

you how to add diluent in a way that does not cause it to spray back out of the vial.

- ▶ After adding the diluent, you should shake the vial until the liquid is clear. Your veterinarian will usually have you dilute the entire vial in another larger bag of fluids for administration under the skin.
- ▶ Piperacillin/tazobactam liquid solutions break down quickly if not mixed exactly as instructed and must be stored in the refrigerator.
- ▶ Piperacillin/tazobactam injections may sting when given. If your animal objects to the injections too much, your veterinarian may be able to give you something to mix with the piperacillin/tazobactam to decrease stinging.
- ▶ If you have difficulty getting your animal to accept the medication when injected, 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 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.
- ▶ Place used needles and syringes in a sharps disposal container immediately after they have been used. Your veterinarian or pharmacist will help you obtain these containers. Be careful not to accidentally stick yourself; do not attempt to disconnect the needle from the syringe. Keep containers out of reach of children and animals. Once about  $\frac{3}{4}$  full, dispose containers according to your community guidelines. Check with your local trash removal services or health department (listed online and in the city or county government [blue] pages in your phone book) to see which disposal methods are available in your area.

#### **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 bottle, vial or another container provided by your pharmacist or veterinarian. Dry vials of the powder may be stored at room temperature but once mixed, the liquid should be stored in the refrigerator.
- ▶ Once mixed, the expiration date of the medicine varies but can be no longer than 2 days if kept in the refrigerator; one day if at room temperature. Do not use any mixed drug after this expiration date.
- ▶ 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. 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 leftover 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.**