Memorial Sloan Kettering Cancer Center

PATIENT & CAREGIVER EDUCATION

Gentamicin (Systemic

This information from UpToDate® Lexidrug™ explains what you need to know about this medication, including what it's used for, how to take it, its side effects, and when to call your healthcare provider.

Warning

- This drug may cause kidney, nerve, and hearing problems (like long-lasting hearing loss), even at normal doses. The risk may be higher if you already have kidney or hearing problems, you take higher doses, or you use this drug for a long time. The risk may be higher in older people, infants, or with dehydration. Hearing loss can happen even after this drug is stopped. If you already have kidney problems or hearing problems, tell your doctor. You may need to have hearing and kidney tests.
- Do not use this drug if you are taking or have recently taken any drugs that can cause nerve, kidney, or hearing problems. This may be drugs like amphotericin B, bacitracin, cephaloridine, cisplatin,

colistin, cyclosporine, ethacrynic acid, furosemide, paromomycin, polymyxin B, vancomycin, viomycin, or other drugs like this one. There are many other drugs that can do this. Ask your doctor or pharmacist if you are not sure.

- Muscle problems (muscle weakness) and severe breathing problems have happened with drugs like this one. The risk is higher in people who already have nerve or muscle problems like myasthenia gravis. The risk is also higher in people who are getting other drugs like those that are used to put you to sleep or to relax muscles. If you have questions, talk with the doctor.
- This drug may cause harm to the unborn baby if you take it while you are pregnant. If you are pregnant or you get pregnant while taking this drug, call your doctor right away.

What is this drug used for?

- It is used to treat bacterial infections.

What do I need to tell my doctor BEFORE I take this drug?

- If you are allergic to this drug; any part of this drug; or any other drugs, foods, or substances. Tell your doctor

about the allergy and what signs you had.

This drug may interact with other drugs or health problems.

Tell your doctor and pharmacist about all of your drugs (prescription or OTC, natural products, vitamins) and health problems. You must check to make sure that it is safe for you to take this drug with all of your drugs and health problems. Do not start, stop, or change the dose of any drug without checking with your doctor.

What are some things I need to know or do while I take this drug?

- Tell all of your health care providers that you take this drug. This includes your doctors, nurses, pharmacists, and dentists.
- If you are allergic to sulfites, talk with your doctor. Some products have sulfites.
- Have your blood work, hearing, and other lab tests checked as you have been told by your doctor.
- Do not use longer than you have been told. A second infection may happen.
- If you are 65 or older, use this drug with care. You could have more side effects.
- Tell your doctor if you are breast-feeding. You will need to talk about any risks to your baby.

What are some side effects that I need to call my doctor about right away?

WARNING/CAUTION: Even though it may be rare, some people may have very bad and sometimes deadly side effects when taking a drug. Tell your doctor or get medical help right away if you have any of the following signs or symptoms that may be related to a very bad side effect:

- Signs of an allergic reaction, like rash; hives; itching; red, swollen, blistered, or peeling skin with or without fever; wheezing; tightness in the chest or throat; trouble breathing, swallowing, or talking; unusual hoarseness; or swelling of the mouth, face, lips, tongue, or throat.
- Signs of kidney problems like unable to pass urine, change in how much urine is passed, blood in the urine, or a big weight gain.
- Signs of high or low blood pressure like very bad headache or dizziness, passing out, or change in eyesight.
- Dizziness or passing out.
- Change in balance.
- Ringing in the ears, hearing loss, or any other changes in hearing.
- Muscle weakness.
- Trouble breathing that is new or worse.

- A burning, numbness, or tingling feeling that is not normal.
- Twitching.
- Seizures.
- Feeling confused.
- Feeling very tired or weak.
- Depression.
- Change in eyesight.
- Fever.

What are some other side effects of this drug?

All drugs may cause side effects. However, many people have no side effects or only have minor side effects. Call your doctor or get medical help if any of these side effects or any other side effects bother you or do not go away:

- Decreased appetite.
- Weight loss.
- Headache.
- Upset stomach or throwing up.
- More saliva.
- Mouth irritation or mouth sores.
- Hair loss.

- Joint pain.

These are not all of the side effects that may occur. If you have questions about side effects, call your doctor. Call your doctor for medical advice about side effects.

You may report side effects to your national health agency.

You may report side effects to the FDA at 1- 800-332-1088. You may also report side effects at https://www.fda.gov/medwatch.

How is this drug best taken?

Use this drug as ordered by your doctor. Read all information given to you. Follow all instructions closely.

- It is given as a shot into a muscle or as an infusion into a vein over a period of time.
- Drink lots of noncaffeine liquids unless told to drink less liquid by your doctor.

What do I do if I miss a dose?

- Call your doctor to find out what to do.

How do I store and/or throw out this drug?

- If you need to store this drug at home, talk with your doctor, nurse, or pharmacist about how to store it.

General drug facts

- If your symptoms or health problems do not get better or if they become worse, call your doctor.
- Do not share your drugs with others and do not take anyone else's drugs.
- Keep all drugs in a safe place. Keep all drugs out of the reach of children and pets.
- Throw away unused or expired drugs. Do not flush down a toilet or pour down a drain unless you are told to do so. Check with your pharmacist if you have questions about the best way to throw out drugs. There may be drug take-back programs in your area.
- Some drugs may have another patient information leaflet. If you have any questions about this drug, please talk with your doctor, nurse, pharmacist, or other health care provider.
- Some drugs may have another patient information leaflet. Check with your pharmacist. If you have any questions about this drug, please talk with your doctor, nurse, pharmacist, or other health care provider.
- If you think there has been an overdose, call your poison control center or get medical care right away. Be ready to tell or show what was taken, how much, and when it happened.

Consumer Information Use and Disclaimer

This generalized information is a limited summary of diagnosis, treatment, and/or medication information. It is not meant to be comprehensive and should be used as a tool to help the user understand and/or assess potential diagnostic and treatment options. It does NOT include all information about conditions, treatments, medications, side effects, or risks that may apply to a specific patient. It is not intended to be medical advice or a substitute for the medical advice, diagnosis, or treatment of a health care provider based on the health care provider's examination and assessment of a patient's specific and unique circumstances. Patients must speak with a health care provider for complete information about their health, medical questions, and treatment options, including any risks or benefits regarding use of medications. This information does not endorse any treatments or medications as safe, effective, or approved for treating a specific patient. UpToDate, Inc. and its affiliates disclaim any warranty or liability relating to this information or the use thereof. The use of this information is governed by the Terms of Use, available at https://www.wolterskluwer.com/en/know/clinical-effectiveness-terms.

Last Reviewed Date

2023-03-22

Copyright

© 2026 UpToDate, Inc. and its affiliates and/or licensors. All rights reserved.

If you have questions or concerns, contact your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.

Gentamicin (Systemic - Last updated on December 12, 2022
All rights owned and reserved by Memorial Sloan Kettering Cancer Center