PATIENT & CAREGIVER EDUCATION

Arsenic Trioxide

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.

Brand Names: US

Trisenox

Brand Names: Canada

Trisenox [DSC]

Warning

- A health problem called differentiation syndrome has happened. This may cause organ problems and can be deadly. Call your doctor right away if you have bone pain, cough, fever, shortness of breath or other breathing problems, sudden weight gain, swelling in the arms or legs, or swollen gland. Call your doctor right away if you have signs of liver problems like dark urine or yellow skin or eyes; signs of kidney problems like unable to pass urine, change in amount of urine passed, or blood in the urine; or signs of low blood pressure like dizziness or passing out.
- This drug may cause a very bad and sometimes deadly type of heartbeat that is not normal (long QT on ECG, torsades de pointes). The chance may be raised if you take amphotericin B or some types of water pills (diuretics), if you have low potassium or magnesium levels, or if you have heart failure. If you have ever had a long QT on ECG or other abnormal heartbeat, talk with your doctor. This drug may not be right for you. If you have questions, talk with your doctor.
- Talk with your doctor if you are taking any drugs that can cause a certain type of heartbeat that is not normal (prolonged QT interval). There are many drugs that can do this. Ask your doctor or pharmacist if you are not sure.
- Have your blood work checked and an ECG (to see how your heart beats) as you have been told by your doctor.
- Severe brain or nervous system problems, like Wernicke's encephalopathy, have happened with this drug. Talk with your doctor if you take furosemide, drink alcohol on a regular basis, have low thiamine levels, have poor nutrition, or if your body does not take in nutrients well. Call your doctor right away if you feel confused or very sleepy. Call your doctor right away if you have a change in balance, change in eyesight, trouble thinking or walking, or seizures.

What is this drug used for?

- It is used to treat a type of leukemia.

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.
- If you are taking any drugs that can cause electrolyte problems. There are many drugs that can do this. Ask your doctor or pharmacist if you are not sure.
- If you are breast-feeding. Do not breast-feed while you take this drug and for 2 weeks after your last dose.

This is not a list of all drugs or health problems that interact with this drug.

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.
- You may have more chance of getting an infection. Wash hands often. Stay away from people with infections, colds, or flu.
- You may bleed more easily. Be careful and avoid injury. Use a soft toothbrush and an electric razor.
- This drug may add to the chance of getting some types of cancer. Talk with the doctor.

- If you have upset stomach, throwing up, diarrhea, or decreased appetite, talk with your doctor. There may be ways to lower these side effects.
- If you have high blood sugar (diabetes), talk with your doctor. This drug may raise blood sugar.
- Check your blood sugar as you have been told by your doctor.
- If you are 65 or older, use this drug with care. You could have more side effects.
- This drug may cause harm to an unborn baby. A pregnancy test will be done before you start this drug to show that you are NOT pregnant.
- If you may become pregnant, use birth control while taking this drug and for 6 months after your last dose. If you get pregnant, call your doctor right away.
- This drug may affect sperm. This may affect being able to father a child. Talk with the doctor.
- If your sex partner may become pregnant, use a condom while taking this drug and for 3 months after your last dose. If your partner gets pregnant, call the doctor right away.

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 bleeding like throwing up or coughing up blood; vomit that looks like coffee grounds; blood in the urine; black, red, or tarry stools; bleeding from the gums; abnormal vaginal bleeding; bruises without a cause or that

get bigger; or bleeding you cannot stop.

- Signs of infection like fever, chills, very bad sore throat, ear or sinus pain, cough, more sputum or change in color of sputum, pain with passing urine, mouth sores, or wound that will not heal.
- Signs of high blood sugar like confusion, feeling sleepy, unusual thirst or hunger, passing urine more often, flushing, fast breathing, or breath that smells like fruit.
- Signs of electrolyte problems like mood changes; confusion; muscle pain, cramps, or spasms; weakness; shakiness; change in balance; an abnormal heartbeat; seizures; loss of appetite; or severe upset stomach or throwing up.
- Signs of high or low blood pressure like very bad headache or dizziness, passing out, or change in eyesight.
- Chest pain or pressure, a fast heartbeat, or an abnormal heartbeat.
- Swollen gland.
- Depression.
- A burning, numbness, or tingling feeling that is not normal.
- Shakiness.
- Fast breathing.
- Feeling agitated.
- Ringing in the ears, hearing loss, or any other changes in hearing.
- Swelling.
- Pale skin.

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:

- Headache.

- Feeling dizzy, sleepy, tired, or weak.
- Constipation, diarrhea, stomach pain, upset stomach, throwing up, or decreased appetite.
- Weight gain or loss.
- Dry mouth, skin, or eyes.
- Trouble sleeping.
- Back, bone, joint, muscle, or neck pain.
- Sweating a lot.
- Pain, redness, or swelling where the shot was given.
- Eye irritation.
- Anxiety.
- Pain in arms or legs.
- Flushing.
- Skin irritation.
- Ear pain.
- Signs of a common cold.

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 an infusion into a vein over a period of time.

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

2025-03-26

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.

Arsenic Trioxide - Last updated on December 12, 2022
All rights owned and reserved by Memorial Sloan Kettering Cancer Center