Memorial Sloan Kettering Cancer Center

PATIENT & CAREGIVER EDUCATION

Alemtuzumab

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

Lemtrada

Brand Names: Canada

Lemtrada; MabCampath

Warning

All products:

- Severe and sometimes life-threatening infusion reactions have happened. You will be closely watched during the infusion and for some time after. Severe infusion reactions may also happen up to 48 hours or longer after the infusion. Tell your doctor right away if you have chest pain; passing out; fast or slow heartbeat, or abnormal heartbeat; fever; hives; itching; rash; severe headache or dizziness; shortness of breath, wheezing, or other trouble breathing; swelling of the mouth, face, lips, throat, or tongue; tightness in the chest or throat; abnormal hoarseness; or coughing up blood.
- Other infusion reactions include change in taste, chills, dizziness, flushing, upset stomach, pain, feeling tired, or not able to sleep. Talk with the doctor.
- This drug may cause very bad and sometimes deadly autoimmune problems like some blood problems. Side effects may happen while you

get this drug and for 4 years after you stop treatment. You will need to have your blood work and urine checked while getting this drug and after getting it as you have been told by your doctor. Talk with your doctor.

- Very bad and sometimes deadly infections have happened in patients who take this drug. If you have any infection, are taking antibiotics now or in the recent past, or have had many infections, talk with your doctor.
- Rarely, heart attacks, strokes, and tears in blood vessels of the head and neck have happened with the alemtuzumab product used for MS (multiple sclerosis). Most cases happened within 1 to 3 days after getting this drug. These health problems can lead to long-term disability and can be deadly. Closely read the part in this leaflet which lists when to call your doctor.

Lemtrada:

- This drug may raise the chance of cancer like thyroid cancer, skin cancer, and lymphoma. Have your skin checked and other lab tests done as you have been told by your doctor. Talk with your doctor.

What is this drug used for?

- It is used to treat a type of leukemia.
- It is used to treat MS (multiple sclerosis).
- It may be given to you for other reasons. Talk with the doctor.

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

All products:

- 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 have an infection.

- If you have a weak immune system or a disease that may cause a weak immune system like HIV.
- If you have ever had any of these health problems: Any type of cancer or PML.
- If you are breast-feeding or plan to breast-feed. You may need to avoid breast-feeding.
- If the patient is a child. This drug is not approved for use in children.

Lemtrada:

- If you have a health problem called clinically isolated syndrome (CIS).

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?

All products:

- Tell all of your health care providers that you take this drug. This includes your doctors, nurses, pharmacists, and dentists.
- Have your blood work and other lab tests checked as you have been told by your doctor.
- You may have more chance of getting an infection. Wash hands often. Stay away from people with infections, colds, or flu.
- Talk with your doctor before getting any vaccines. Use of some vaccines with this drug may either raise the chance of an infection or make the vaccine not work as well.
- You may bleed more easily. Be careful and avoid injury. Use a soft

toothbrush and an electric razor.

- This drug may affect fertility. Fertility problems may lead to not being able to get pregnant or father a child. If you plan to get pregnant or father a child, talk with your doctor before taking this drug.
- 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.

Campath:

- 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.
- If your sex partner may get pregnant, you must use birth control for 6 months after you take this drug. If your partner gets pregnant, call the doctor right away.

Lemtrada:

- Make sure you are up to date with all your vaccines at least 6 weeks before treatment with this drug. Talk with your doctor.
- HPV infection of the cervix has happened in some people taking this drug. HPV screening is recommended each year. Talk with your doctor.
- You will need a TB (tuberculosis) test before starting this drug.
- People taking this drug may have a higher chance of getting an infection caused by the listeria bacteria. These infections have happened from 3 days to 8 months after a dose. Some of these infections have been deadly. Before taking this drug and during treatment, avoid foods that may be a source of listeria or make sure that the food you eat that may contain listeria is heated well. Some foods that may be a source of listeria include deli meat; unpasteurized milk and cheese products; or undercooked meat, seafood, or chicken. If you have questions, talk with your doctor.
- Hepatitis B or C testing may be done. A hepatitis B or C infection may get worse while taking this drug.

- A bleeding problem called acquired hemophilia A has happened with this drug. If you have questions, talk with the doctor.
- If you may become pregnant, you must use birth control while taking this drug and for 4 months after the last dose. If you get pregnant, call your 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:

All products:

- 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 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 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 gallbladder problems like pain in the upper right belly area, right shoulder area, or between the shoulder blades; yellow skin or eyes; fever with chills; bloating; or very upset stomach or throwing up.
- Weakness on 1 side of the body, trouble speaking or thinking, change in balance, drooping on one side of the face, or blurred eyesight.
- Neck pain.
- Chest pain or pressure.

- A burning, numbness, or tingling feeling that is not normal.
- Shortness of breath.
- Redness or white patches in mouth or throat.
- A severe brain problem called progressive multifocal leukoencephalopathy (PML) may happen with this drug. It may cause disability or can be deadly. Tell your doctor right away if you have signs like confusion, memory problems, depression, change in the way you act, change in strength on 1 side is greater than the other, trouble speaking or thinking, change in balance, or change in eyesight.
- An immune system problem called hemophagocytic lymphohistiocytosis (HLH) has happened with this drug. HLH can be life-threatening. Call your doctor right away if you have fever, swollen gland, rash, seizures, feeling confused or not alert, change in balance, or trouble walking that is new or worse.

Campath:

- Signs of high or low blood pressure like very bad headache or dizziness, passing out, or change in eyesight.
- Sweating that is not normal.
- Feeling confused.
- Trouble walking.
- Swollen gland.
- Patients with cancer who take this drug may be at a greater risk of getting a severe health problem called tumor lysis syndrome (TLS). This may lead to death. Call your doctor right away if you have a fast or abnormal heartbeat; any passing out; trouble passing urine; muscle weakness or cramps; upset stomach, throwing up, diarrhea, or not able to eat; or feel sluggish.
- Epstein-Barr virus (EBV) infections have happened with this drug. This has caused severe and sometimes deadly liver problems. If you have had EBV, talk with your doctor. Call your doctor right away if you have signs of liver problems like dark urine, tiredness, decreased appetite, upset stomach or

stomach pain, light-colored stools, throwing up, or yellow skin or eyes.

Lemtrada:

- Signs of lung or breathing problems like shortness of breath or other trouble breathing, cough, or fever.
- Signs of thyroid problems like change in weight; feeling nervous, excitable, restless, or weak; hair thinning; depression; eye or neck swelling; not able to focus; trouble with heat or cold; menstrual changes; shakiness; or sweating.
- Signs of thyroid cancer like new lump or swelling in the neck, pain in the front of the neck, cough that does not go away, change in voice that does not go away like hoarseness, or trouble swallowing or breathing.
- Signs of liver problems like dark urine, tiredness, decreased appetite, upset stomach or stomach pain, light-colored stools, throwing up, or yellow skin or eyes.
- Signs of bowel problems (such as colitis) like black, tarry, or bloody stools; fever; mucus in the stools; throwing up blood or throw up that looks like coffee grounds; or severe stomach pain, constipation, or diarrhea.
- Change in color or size of a mole.
- A skin lump or growth.
- Depression.
- Thoughts of hurting yourself or suicide.
- Seizures.
- Memory problems or loss.
- Change in the way you act.
- Agitation.
- Confusion.
- Hallucinations (seeing or hearing things that are not there).
- Swelling in the arms or legs.
- Stiff neck.

- Vaginal itching or discharge.
- Call your doctor right away if you have a swollen gland, night sweats, shortness of breath, or weight loss without trying.
- Certain kidney problems have happened with this drug. These problems can lead to kidney failure, dialysis, or transplant, and can be life-threatening. Call your doctor right away if you have signs of kidney problems like unable to pass urine, change in the amount of urine passed, blood in the urine, or a big weight gain.
- A severe blood problem called thrombotic thrombocytopenic purpura (TTP) has happened with this drug. TTP can be deadly. Call your doctor right away if you feel confused, very tired or weak, or have a change in eyesight. Call your doctor right away if you have a fast heartbeat; fever; headache; pale skin; less urine passed; pink urine; urine that has blood in it; purple spots on the skin or mouth; seizures; severe diarrhea, stomach pain, upset stomach, or throwing up; shortness of breath; or yellow skin or eyes.
- A rare health problem called adult-onset Still's disease (AOSD) has happened with this drug. Call your doctor right away if you have fever that lasts more than 1 week, pain, stiffness with or without swelling in joints, or rash.

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:

All products:

- Anxiety.
- Headache.
- Upset stomach or throwing up.
- Stomach pain or diarrhea.
- Trouble sleeping.

Campath:

- Decreased appetite.
- Back pain.
- Muscle pain.
- Feeling tired or weak.

Lemtrada:

- Pain in arms or legs.
- Feeling dizzy, tired, or weak.
- Flushing.
- Back, muscle, joint, arm, or leg pain.
- Muscle spasm.
- Muscle weakness.
- Nose or throat irritation.
- Change in taste.

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.
- Other drugs may be given with this drug to help avoid side effects.

- Drink lots of noncaffeine liquids every day 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.
- This drug comes with an extra patient fact sheet called a Medication Guide. Read it with care. Read it again each time this drug is refilled. If you have any questions about this drug, please talk with the doctor, 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

2024-07-26

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.

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