Alemtuzumab

- **Alemtuzumab** (uh-lem-TOOZ-uh-mab) is a drug that is used to treat many types of cancers. It is a monoclonal antibody, a type of protein designed to target and kill cancer cells. It is a clear liquid that is injected under the skin (subcutaneously).
- Tell your doctor if you have ever had an unusual or **allergic reaction** to alemtuzumab or other monoclonal antibodies such as rituximab before taking alemtuzumab.
- A **blood test** may be taken weekly before each treatment. The dose and timing of your chemotherapy may be changed based on the test results and/or other side effects.
- **Injections** under the skin may be done at home. If you are doing your own injections at home, a nurse will teach you how to give these injections. It is important to use alemtuzumab exactly as directed by your doctor. Make sure you understand the directions and feel comfortable with the injections.
    - **Store** alemtuzumab in the refrigerator, out of the reach of children. Do not shake alemtuzumab vigorously, as it may be damaged. Do not freeze.
    - **Take** the alemtuzumab out of the refrigerator and allow it to warm to room temperature for 30 minutes before the injection is given. Do not use heat to warm the injection.
    - **Use** the injection within 8 hours of preparation.
    - Use a **different site for each injection.** You will be taught which sites on your body can be used.
    - Use each **needle only once** to avoid infection. Discard any unused alemtuzumab and used needles in a rigid plastic container with a lid. Discard the container as instructed by your treatment center. Keep out of reach of children.
- Some **immunizations** (flu shots and vaccines) may be less within 1 year of alemtuzumab treatment. Some immunizations should not be used within 1 year after alemtuzumab treatment. Talk to your doctor before receiving any immunizations.
- Some drugs, herbal products and supplements may **interact** with your treatment. Tell your doctor or pharmacist if you are taking any of these or before you start taking any new drugs.
- It is not known if alemtuzumab causes **sterility** in men or **menopause** in women. If you plan to have children, discuss this with your doctor before being treated with alemtuzumab.
- Alemtuzumab may damage sperm. It is not known if alemtuzumab may harm the baby if used during pregnancy. It is best to use **birth control** while being treated with alemtuzumab, and for six months after your last treatment. Tell your doctor right away if you or your partner becomes pregnant. Do not breast feed during treatment, and for at least three months after your last treatment.
- **Tell** doctors, dentists or other healthcare providers that you are being treated with this medication before you receive any other treatment from them.

Changes in blood counts

This drug may cause temporary changes in your blood counts. Your doctor will be following these changes carefully by performing blood tests. Adjustment of your treatment may be needed in certain circumstances.

SIDE EFFECTS	MANAGEMENT
Normal white blood cells protect your body by fighting bacteria (germs) that cause infection. **When they are low, you are at greater risk of getting an infection.**	**To help prevent infection:** • Wash your hands often and always after using the bathroom. • Avoid crowds and people who are sick. • Visit the Urgent Care Unit at the National Center for Cancer Care and Research (NCCCR) **immediately** at the first sign of an infection such as fever (over 100°F or 38°C by an oral thermometer), chills, cough, or burning when you pass urine.
Normal platelets help your blood to clot normally after an injury (e.g., cut). **When the platelet count is low you may be more likely to bruise or bleed.**	To help prevent bleeding problems: • Try not to bruise, cut, or burn yourself. • Clean your nose by blowing gently. • Do not pick your nose. • Avoid constipation. • Brush your teeth gently with a soft toothbrush as your gums may bleed more easily. Maintain good oral hygiene. Some medications such as aspirin, ibuprofen or other pain medications may increase your risk of bleeding. • For minor pain, try paracetamol (Panadol®) • Refer to your doctor if any of these medications have been prescribed to you.
Red blood cells carry oxygen throughout your body. Your red blood cells may decrease after your treatment**. You may feel more tired or short of breath than usual.**	Tell your doctor if you are feeling light-headed, weak, or short of breath.

Side effects that may occur and tips for management

SIDE EFFECTS	MANAGEMENT
Fever may commonly occur shortly after your first treatment with alemtuzumab and with each increase in dose. **Chills** may sometimes occur shortly after your first treatment with alemtuzumab and with each increase in dose. These reactions should last no longer than 24 hours and usually disappear on their own. Reactions are less common with later treatments even if you have a reaction with the first treatment.	• You be given medications before your treatment to help prevent a reaction. • Tell your nurse or doctor immediately if you have a reaction during or after the treatment. • You may be given other drugs to treat the reaction. • Your alemtuzumab dose may be increased more slowly. • Fever and chills which occur more than 48 hours after treatment may be signs of an infection, Visit the Urgent Care Unit at the National Center of Cancer Care and Research (NCCCR) **immediately**.
Redness, swelling, pain or tenderness commonly occurs where the needle was placed.	To help prevent local reactions: • Apply an ice pack to the injection site for 15 minutes before and after the injection. • If local reactions are still a problem: • Apply cool compresses for 15-20 minutes several times a day after the injection. • Tell your doctor or your nurse at the next visit if these reactions continue after 2-3 weeks of treatment.
Nausea does not usually occur with alemtuzumab when it is administered subcutaneously.	
Muscle or joint pain may sometimes occur.	Some medications such as aspirin, ibuprofen or other pain medications may increase your risk of bleeding. • Take paracetamol (Panadol ®) for moderate-minor pain. • Refer to your doctor if any of these medications have been prescribed to you • Tell your doctor if the pain interferes with your activity.
You may sometimes have **trouble sleeping.**	• Talk to your doctor if you continue to have trouble sleeping. • This will return to normal when you stop taking alemtuzumab.
Loss of appetite may sometimes occur.	
Hair loss does not occur with alemtuzumab.	

SEE YOUR DOCTOR OR GET EMERGENCY HELP IMMEDIATELY IF YOU HAVE:

- Signs of an **allergic reaction** (rare) soon after a treatment including dizziness, fast heartbeat, face swelling or breathing problems.
- Signs of an **infection** such as fever (over 100°F or 38°C by an oral thermometer); chills; cough; pain or burning when you pass urine.
- Signs of **bleeding problems** such as black, tarry stools; blood in the urine; pinpoint red spots on skin, extensive bruising.
- Signs of **heart or lung problems** such as a fast or uneven heartbeat, chest pain, chest pressure, shortness of breath, or difficulty in breathing, swelling of ankles, or fainting.

SEE YOUR DOCTOR AS SOON AS POSSIBLE (DURING OFFICE HOURS) IF YOU HAVE:

- Signs of **anemia** such as unusual tiredness or weakness.

CHECK WITH YOUR DOCTOR IF ANY OF THE FOLLOWING CONTINUE OR BOTHER YOU:

- Uncontrolled nausea, vomiting, or diarrhea.
- Headache or pain not controlled with paracetamol (Panadol ®).
- Easy bruising or minor bleeding.
- Numbness or tingling in feet or hands.
- Swelling of hands, feet, or lower legs.
- Feeling dizzy or light-headed.
- Redness, swelling, pain, or sores on your lips, tongue, mouth, or throat.

REPORT ADDITIONAL PROBLEMS TO YOUR DOCTOR

This is a summary of useful information to help you understand and take your medicine safely .

We are available to answer your questions For urgent inquiries contact :

- **Urgent care unit at the National Center of Cancer Care and Research (NCCCR) TEL : 44397179 (available 24 hours, all week days).**

For further information or question contact :

- **Your doctor** (from 7 am – 3 pm) .
- **Clinical Pharmacy section,** TEL: 44397239 (Sun-Thurs from 7 am – 3 pm) .
- **Outpatient Pharmacy**, TEL: 44397531, 44397825 (Sun-Thurs from 7 am – 3 pm) .

Pharmacy Department

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