



**For the Patient: Alemtuzumab SC injection**  
Other names: MABCAMPATH®, CAMPATH®

**BC Cancer Agency**

- 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 giving your own injection 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 injection. 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 container as instructed by your treatment centre. Keep out of reach of children.
- Some immunizations (**flu shots and vaccines**) may be less effective during or within 1 year after alemtuzumab treatment. Some immunizations should not be used during or within 1 year after alemtuzumab treatment. Talk to your doctor before receiving any immunizations.
- Other drugs may **interact** with alemtuzumab. Check with your doctor or pharmacist before you start taking any new drugs.
- The **drinking of alcohol** (in small amounts) does not appear to affect the safety or usefulness of alemtuzumab.

- 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 or dentists that you are being treated with alemtuzumab before you receive any treatment from them.

### Changes in blood counts

Alemtuzumab may cause changes in your blood counts for an extended period of time. Your doctor will be following these changes carefully by performing blood tests.

Adjustment of your treatment may be needed in certain circumstances.

BLOOD COUNTS	MANAGEMENT
<p>Normal white blood cells protect your body by fighting bacteria (germs) that cause infection. <b>When they are low, you are at greater risk of having an infection.</b></p>	<p>To help prevent infection:</p> <ul style="list-style-type: none"> <li>• You will be given an antibiotic and an antiviral medication to take while you are receiving alemtuzumab and for at least 2 months after your treatment with alemtuzumab. Be sure you understand the instructions.</li> <li>• Wash your hands often and always after using the bathroom.</li> <li>• Avoid crowds and people who are sick.</li> <li>• Call your doctor <b>immediately</b> at the first sign of an infection such as fever (over 100°F or 38°C by an oral thermometer), shaking chills; cough, severe sore throat, productive cough (coughing up thick or green sputum; cloudy or foul smelling urine; painful, tender, or swollen red skin wounds or sores.</li> </ul>

BLOOD COUNTS	MANAGEMENT
<p>Normal platelets help your blood to clot normally after an injury (e.g., cut). <b>When the platelet count is low you may be more likely to bruise or bleed.</b></p>	<p>To help prevent bleeding problems:</p> <ul style="list-style-type: none"> <li>• Try not to bruise, cut, or burn yourself.</li> <li>• Clean your nose by blowing gently. Do not pick your nose.</li> <li>• Avoid constipation.</li> <li>• Brush your teeth gently with a soft toothbrush as your gums may bleed more easily. Maintain good oral hygiene.</li> </ul> <p>Some medications such as ASA (e.g., ASPIRIN®) or ibuprofen (e.g., ADVIL®) may increase your risk of bleeding.</p> <ul style="list-style-type: none"> <li>• Do not stop taking any medication that has been prescribed by your doctor (e.g., <b>ASA for your heart</b>).</li> <li>• For minor pain, try acetaminophen (e.g., TYLENOL) first, but occasional use of ibuprofen may be acceptable.</li> </ul>
<p>Red blood cells carry oxygen throughout your body. Your red blood cells may decrease after your treatment. <b>You may feel more tired or short of breath than usual.</b></p>	<ul style="list-style-type: none"> <li>• Tell your doctor if you are feeling light-headed, weak, or short of breath.</li> <li>• Try the ideas in <i>Your Bank of Energy Savings: How People with Cancer Can Handle Fatigue</i>.*</li> </ul>

Side effects are listed in the following table in the order in which they may occur. Tips to help manage the side effects are included.

SIDE EFFECTS	MANAGEMENT
<p><b>Fever</b> may commonly occur shortly after your first treatment with alemtuzumab and with each increase in dose.</p> <p><b>Chills</b> may sometimes occur shortly after your first treatment with alemtuzumab and with each increase in dose.</p> <p>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.</p>	<p>You will take acetaminophen (e.g., TYLENOL®) and diphenhydramine (e.g., BENADRYL®) before your treatment to help prevent a reaction. Tell your nurse or doctor <b>immediately</b> if you have a reaction after the treatment.</p> <ul style="list-style-type: none"> <li>• You may be given other drugs to treat the reaction.</li> <li>• Your alemtuzumab dose may be increased more slowly.</li> <li>• Fever and chills which occur more than 48 hours after treatment may be signs of an infection. They should be reported to your doctor <b>immediately</b>.</li> </ul>

SIDE EFFECTS	MANAGEMENT
<p><b>Redness, swelling, pain or tenderness</b> commonly occurs where the needle was placed.</p> <p>These reactions typically occur within 72 hours and usually disappear on their own. Reactions are less common with later treatments even if you have a reaction with the first treatment.</p>	<p>To help prevent local reactions:</p> <ul style="list-style-type: none"> <li>• Apply an ice pack to the injection site for 15 minutes before and after the injection.</li> </ul> <p>If local reactions are still a problem:</p> <ul style="list-style-type: none"> <li>• Apply cool compresses for 15-20 minutes several times a day after the injection.</li> <li>• Tell your doctor or your nurse at the next visit if these reactions continue after 2-3 weeks of treatment.</li> </ul>
<p><b>Nausea</b> does not usually occur with alemtuzumab when it is administered subcutaneously.</p>	
<p><b>Muscle or joint pain</b> sometimes occurs.</p>	<ul style="list-style-type: none"> <li>• You may take acetaminophen (e.g., TYLENOL®) for mild to moderate pain. Avoid ASA (e.g., ASPIRIN®) or ibuprofen (e.g., ADVIL®) as they may increase your risk of bleeding. If you need to take these medications, tell your doctor at your next visit.</li> </ul> <p>Tell your doctor if the pain interferes with your activity.</p>
<p>You may rarely have <b>trouble sleeping</b>.</p>	<ul style="list-style-type: none"> <li>• Talk to your doctor if you continue to have trouble sleeping.</li> <li>• This will return to normal when you stop taking alemtuzumab.</li> </ul>
<p><b>Loss of appetite</b> may sometimes occur.</p>	<p>Try the ideas in <i>Food Ideas to Help with Decreased Appetite</i>.*</p>
<p><b>Hair loss</b> does not occur with alemtuzumab.</p>	

**\*Please ask your chemotherapy nurse or pharmacist for a copy.**

### **STOP TAKING ALEMTUZUMAB AND SEE YOUR DOCTOR OR GET EMERGENCY HELP IMMEDIATELY IF YOU HAVE:**

- Signs of an **allergic reaction** (rare) soon after a treatment including dizziness, fast heart beat, face swelling, or breathing problems.
- Signs of an **infection** such as fever (over 100°F or 38°C by an oral thermometer), shaking chills; cough, severe sore throat, productive cough (coughing up thick or green sputum; cloudy or foul smelling urine; painful, tender, or swollen red skin wounds or sores.
- Signs of **bleeding problems** such as black, tarry stools; blood in urine; pinpoint red spots on skin; extensive bruising.

