



Provincial Health Services Authority

For the Patient: LYMCALT

Other names: Treatment of Mantle Cell Lymphoma with CHOPR alternating with DHAPR

LY = LYmphoma

MC = Mantle Cell

ALT = ALTernating regimen

ABOUT THIS TREATMENT

- LYMCALT is a drug treatment for mantle cell lymphoma. It is currently offered to patients with high risk features of this type of Non-Hodgkin's Lymphoma.
- This therapy is being given to destroy and/or limit the growth of cancer cells in your body.

TREATMENT SUMMARY

- The treatment will be given in 'cycles'. Each cycle length is 3 weeks.
- Your treatment plan consists of 2 different drug regimens (CHOPR and DHAPR), which alternate every 3 weeks. You will receive a total of 6 cycles (3 cycles of CHOPR and 3 cycles of DHAPR).
- For each CHOPR cycle:
 - You will receive 5 chemotherapy drugs: cyclophosphamide, doxorubicin, vincristine, prednisone and rituximab.
 - All drugs, except the prednisone, are given by injection into a vein (intravenously or IV). Rituximab can be given by injection into a vein or injected under the skin (subcutaneously or SC).
 - Your very first treatment cycle will be over 2 days. The first day (Day 1) will be about 2 hours; the next day (Day 2) plan to spend about 5 hours in the treatment room. Each cycle thereafter will be approximately 3 hours. You may receive all the drugs on Day 1 or you may receive the drugs on two separate days (Day 1 and 2).
 - Prednisone is taken by mouth, once daily with food, for the first 5 days of each cycle (Days 1 to 5).
- For each DHAPR cycle:
 - You will receive 4 chemotherapy drugs: cytarabine, cisplatin (or carboplatin), rituximab and dexamethasone.
 - All drugs, except the dexamethasone, are given by injection into a vein. Rituximab can be given by injection into a vein or injected under the skin (subcutaneously or SC).
 - You will receive this treatment for 3 days, on Days 1 to 3. The treatment will last about 3 to 8 hours each day. You may also receive treatment on Day 8, dependent on lab result.
 - You will be given an oral medication (dexamethasone) to start on Day 1 and you will need to take this daily for a total of 4 days (Days 1 to 4).

The calendar below outlines your overall treatment plan:

Cycle	1	2	3	4	5	6
Regimen	CHOPR	DHAPR	CHOPR	DHAPR	CHOPR	DHAPR
Medications	Prednisone Days 1 to 5	Dexamethasone Days 1 to 4	Prednisone Days 1 to 5	Dexamethasone Days 1 to 4	Prednisone Days 1 to 5	Dexamethasone Days 1 to 4
	Doxorubicin Day 1	Cisplatin Day 1*	Doxorubicin Day 1	Cisplatin Day 1*	Doxorubicin Day 1	Cisplatin Day 1*
	Vincristine Day 1	Cytarabine Days 2 and 3	Vincristine Day 1	Cytarabine Days 2 and 3	Vincristine Day 1	Cytarabine Days 2 and 3
	Cyclophosphamide Day 1	Rituximab Day 1	Cyclophosphamide Day 1	Rituximab Day 1	Cyclophosphamide Day 1	Rituximab Day 1
	Rituximab Day 1 or 2		Rituximab Day 1		Rituximab Day 1	

*Cisplatin may sometimes be given on Day 1 and Day 8

What will happen when I get my drugs?

- You will see your clinician and will need to have a blood test before each treatment.
- The dose and timing of your treatment may be changed based on your blood counts and/or other side effects.
- Your clinician will be assessing whether your cancer is improving with each treatment.
- Your very first treatment will take longer than other treatments because a nurse will be reviewing the possible side effects of your treatment plan and will discuss with you how to manage them. *It is a good idea to bring someone with you to your first chemotherapy appointment.*
- You will be given a prescription for anti-nausea medications (to be filled at your regular pharmacy). Please bring your anti-nausea medications with you for each treatment. Your nurse will tell you when to take the anti-nausea medication.
- You may also need to take your anti-nausea drugs at home after therapy. It is easier to prevent nausea than to treat it once it has occurred, so follow directions closely.
- Please also purchase acetaminophen 325 mg and diphenhydramine 25 mg; you will need these prior to rituximab.
- During the rituximab infusion, the nurse may monitor your heart rate, breathing and blood pressure at frequent intervals.
- You will need to take dexamethasone eye drops to decrease your chance of developing eye problems from the cytarabine in the DHAPR cycles. You will be given a prescription to be filled at your regular pharmacy. It is very important that you bring the eye drops with you to your treatments. **The first dose will be given immediately before first cytarabine dose in Cycles 2, 4 and 6 and you will continue to take these eye drops every 6 hours until 48 hours after the last cytarabine dose of the cycle.** Your nurse will assist with instructions for using eye drops. It may be helpful to set an alarm so that you do not miss a dose.

- During the course of your treatment, your oncologist may decide that you need a drug called filgrastim (also known as G-CSF, granulocyte colony stimulating factor) to improve your white blood cell count. If it is needed, the drug is given as an injection under the skin (subcutaneous, SC) daily for 3 to 5 days, starting a few days after the chemotherapy (your doctor will specify when to start this). Your nurse will teach you or a family member how to give a SC injection. The filgrastim prescription is filled at your community pharmacy and, since it is not commonly available the drugstore may require 1 to 2 days to obtain the drug.

INSTRUCTIONS

- Check with your doctor or pharmacist before you start taking any new drugs. Other medications may interact with your treatment.
- **You may be asked to skip your blood pressure medication 12 hours before and during rituximab treatment.**
- **Drink** 8-12 cups of liquid a day on the day of your treatment and the day after your treatment.
- **After your CHOPR treatment, empty your bladder** (pass urine) every 2 hours while you are awake and at bedtime for at least 24 hours. Your doctor may also tell you to get up in the night to empty your bladder. This helps prevent bladder and kidney problems.
- You may drink small amounts of alcohol, as it will not affect the safety or effectiveness of your treatment. Drinking alcohol may increase the risk of some side effects of dexamethasone and prednisone; discuss this with your doctor or pharmacist.
- **Tell** other doctors or dentists that you are being treated with LYMCALT chemotherapy before you receive any treatment from them.
- **Tell** doctors, nurses, and pharmacists that you are being treated with rituximab subcutaneous injection before you receive other subcutaneous injections. Other medications should not be injected into the same injection site as rituximab if possible.
- Use effective contraception (birth control) if you could become pregnant or if your partner could become pregnant. Becoming pregnant while on chemotherapy will likely harm the baby. Do not breast feed.

CHEMOTHERAPY SIDE EFFECTS AND MANAGEMENT

Are there any risks?

Unexpected and unlikely side effects can occur with any drug treatment. The ones listed below are particularly important for you to be aware of.

Changes in blood counts

Your treatment may cause temporary changes in your blood counts. Your healthcare team will be following these changes carefully by ordering regular 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. When they are low, you are at greater risk of having an infection.</p>	<p>To help prevent infection:</p> <ul style="list-style-type: none"> • Wash your hands often and always after using the bathroom. • Avoid crowds and people who are sick. • Call your healthcare team immediately at the first sign of an infection such as fever (over 38°C or 100°F by an oral thermometer), chills, cough, or burning when you pass urine.
<p>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.</p>	<p>To help prevent bleeding problems:</p> <ul style="list-style-type: none"> • 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. <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"> • Do not stop taking any medication that has been prescribed by your doctor (e.g., ASA for your heart), but do discuss this with your doctor. • For minor pain, try acetaminophen (e.g., TYLENOL®) first, but occasional use of ibuprofen (eg, ADVIL®, MOTRIN®) may be acceptable. Take your temperature prior to taking acetaminophen-containing products.

SIDE EFFECTS	MANAGEMENT
<p>Fevers and chills may occur especially during the first rituximab treatment.</p>	<ul style="list-style-type: none"> • You will take acetaminophen (eg, TYLENOL®) and diphenhydramine (eg, BENADRYL®) before and every 4 hours during your rituximab treatment. Tell your nurse immediately if you have a reaction during treatment.

SIDE EFFECTS	MANAGEMENT
<p>Fever may commonly occur shortly after treatment with cytarabine. Fever should last no longer than 24 hours.</p>	<ul style="list-style-type: none"> • Take acetaminophen (e.g., TYLENOL®) every 4-6 hours, to a maximum of 4 g (4000 mg) per day. • Fever (over 38°C or 100°F by an oral thermometer) which occurs more than a few days after treatment may be a sign of an infection. Report this to your healthcare team immediately.
<p>Eye or vision problems (such as red or watery eyes, sensitivity to light, eye pain, or blurry vision) sometimes occur with cytarabine.</p>	<ul style="list-style-type: none"> • You may be given a prescription for eye drops to prevent eye problems before they occur. It is important to follow the directions closely. • Tell your healthcare team if you have eye problems. If you have eye pain or changes in your vision, report this to your healthcare team immediately.
<p>Allergic reactions commonly occur with rituximab. Signs of an allergic reaction may include flushing, rash, hives, itching, dizziness, swelling or breathing problems. These reactions can occur immediately after receiving rituximab. Reactions usually only occur with the first or second treatment.</p> <p>Allergic reactions may rarely occur with cisplatin and carboplatin. This reaction occur immediately or several hours after receiving treatment. This reaction can occur after the first dose or after many doses of cisplatin or carboplatin.</p>	<ul style="list-style-type: none"> • Tell your nurse if this happens while you are receiving rituximab or contact your oncologist immediately if this happens after you leave the clinic.
<p>Cisplatin burns if it leaks under the skin.</p>	<ul style="list-style-type: none"> • Tell your nurse immediately if you feel pain, burning, stinging, or any other change while the drug is being given.
<p>Pain or tenderness may occur where the needle was placed.</p>	<p>Apply cool compresses or soak in cool water for 15-20 minutes several times a day.</p>

SIDE EFFECTS	MANAGEMENT
<p>Redness, swelling, pain, or tenderness commonly occurs where the needle was placed when rituximab is injected under the skin.</p> <p>These reactions typically occur within 1-2 days and usually disappear on their own. Reactions are less common with later treatments even if you have a reaction with the first treatment.</p>	<ul style="list-style-type: none"> • 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 are very painful or last longer than 2 days.
<p>Nausea and vomiting may occur after your treatment and may last for 48 hours. Nausea may last longer for some patients (i.e. delayed nausea and vomiting). If you are vomiting and it is not controlled, you can quickly become dehydrated.</p>	<p>You may be given a prescription for anti-nausea drug(s) to take before your treatment and/or at home. It is easier to prevent nausea than treat it once it has occurred, so follow directions closely.</p> <ul style="list-style-type: none"> • Drink plenty of fluids. • Eat and drink often in small amounts. • Try the ideas in <i>Practical Tips to Manage Nausea</i>.* <p>Tell your healthcare team if nausea or vomiting continues or is not controlled with your anti-nausea drug(s).</p>
<p>Constipation often occurs and may be severe due to vincristine.</p>	<ul style="list-style-type: none"> • Use stool softeners and laxatives to prevent constipation. • Avoid bulk-forming laxatives (e.g., METAMUCIL®, PRODIEM®). • Drink plenty of fluids. • Exercise if you can. • Try the ideas in <i>Food Choices to Manage Constipation</i>.*
<p>Diarrhea may sometimes occur. If you have diarrhea and it is not controlled, you can quickly become dehydrated.</p>	<p>If diarrhea is a problem:</p> <ul style="list-style-type: none"> • Drink plenty of fluids. • Eat and drink often in small amounts. • Avoid high fibre foods as outlined in <i>Food Choices to Help Manage Diarrhea</i>.* <p>Tell your healthcare team if you have diarrhea for more than 24 hours.</p>

SIDE EFFECTS	MANAGEMENT
<p>Numbness or tingling of fingers or toes could occur due to vincristine. This will slowly return to normal once your treatments are over. This may take several months.</p>	<ul style="list-style-type: none"> • Be careful when handling items that are sharp, hot, or cold. • Be careful when walking on uneven surfaces or doing activities that need you to balance or be steady. • Tell your healthcare team at your next visit if you have trouble with buttons, writing, picking up small objects, walking, or have fallen.
<p>Your urine may be pink or reddish for 1 to 2 days after your treatment.</p>	<ul style="list-style-type: none"> • This is expected as doxorubicin is red and is passed in your urine.
<p>Sore mouth may sometimes occur a few days after treatment. Mouth sores can occur on the tongue, the sides of the mouth, or in the throat. Mouth sores or bleeding gums can lead to an infection.</p>	<ul style="list-style-type: none"> • Brush your teeth gently after eating and at bedtime with a very soft toothbrush. If your gums bleed, use gauze instead of a brush. Use baking soda instead of toothpaste. • Make a mouthwash with ¼ teaspoon baking soda AND ¼ teaspoon salt in 1 cup warm water and rinse several times a day. • Try the ideas in <i>Food Ideas to Try with a Sore Mouth</i>.*
<p>Confusion, memory loss, and/or abnormal speech or body movements may sometimes occur. These symptoms are more common with higher doses.</p>	<ul style="list-style-type: none"> • Call your healthcare team immediately if you have these symptoms.
<p>Tiredness and lack of energy is common especially in the first 1-2 weeks after your treatment. As the number of cycles increases fatigue may get worse.</p>	<ul style="list-style-type: none"> • Your energy level should slowly improve (weeks – months) after your final treatment is completed. • Do not drive a car or operate machinery if you are feeling tired. • Try the ideas in <i>Fatigue/Tiredness – Patient Handout</i>.*
<p>Sugar control may be affected in people with diabetes.</p>	<ul style="list-style-type: none"> • Check your blood sugar regularly if you are diabetic. See your doctor if you have signs of blood sugar problems such as thirst and frequent need to pass urine.

SIDE EFFECTS	MANAGEMENT
<p>Increased energy and difficulty sleeping may be due to prednisone or dexamethasone.</p>	<ul style="list-style-type: none"> • The days you take your prednisone or dexamethasone you may feel as though you have extra energy. • You may also have difficulty sleeping at night. • Take the prednisone and dexamethasone first thing in the morning to prevent insomnia at night.
<p>Hair loss is common and may begin within a few days or weeks of treatment. Your hair may thin or you may lose it completely. Your scalp may feel tender. Hair loss may occur on your face and body. Hair will grow back once your treatments are over and sometimes between treatments. Colour and texture may change. hair growth may be different.</p>	<p>Refer to <i>Resources for Hair Loss and Appearance Changes – Patient Handout</i>.[*] You may also want to:</p> <ul style="list-style-type: none"> • Apply mineral oil to your scalp to reduce itching. • If you lose your eyelashes and eyebrows, protect your eyes from dust and grit with a broad-brimmed hat and glasses.

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

THE FOLLOWING INFORMATION IS VERY IMPORTANT

CHECK WITH YOUR HEALTHCARE TEAM OR GET EMERGENCY HELP IMMEDIATELY IF YOU HAVE:

- Signs of an **infection** such as fever (over 38°C or 100°F 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.
- Signs of an **allergic reaction** (rare) soon after a treatment including dizziness, fast heartbeat, face swelling, or breathing problems.
- **Seizures** or fainting.
- **Memory loss, trouble thinking, or changes in mood; difficulty talking; difficulty with balance, walking, clumsiness, or weakness** on one side of the body
- Signs of **heart or lung problems** such as fast or uneven heartbeat, chest pain, chest pressure, shortness of breath or difficulty in breathing, swelling of ankles, or fainting.

CHECK WITH YOUR HEALTHCARE TEAM AS SOON AS POSSIBLE (DURING OFFICE HOURS) IF YOU HAVE:

- Signs of **anemia** such as unusual tiredness or weakness.
- Signs of **liver problems** such as yellow eyes or skin, white or clay-coloured stools.
- Signs of **gout** such as joint pain.
- **Numbness or tingling** in feet or hands.
- **Changes in eyesight** or **eye irritation**.
- Ringing in your ears or **hearing problems**.
- Difficulty **thinking** clearly and logically.
- Signs of **bladder problems** such as changes in urination, painful burning sensation, presence of blood, or abdominal pain.
- Signs of **kidney problems** such as lower back or side pain, swelling of feet or lower legs, numbness or tingling in feet or hands.
- Uncontrolled **nausea, vomiting** or diarrhea.

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

- Easy bruising or minor bleeding.
- Pain not controlled by acetaminophen.
- Redness, swelling, pain, or sores on your lips, tongue, mouth, or throat.
- Redness, swelling, pain, or sores where the needle was placed.
- Skin rash, itching, or blistering.
- Trouble sleeping.
- Loss of appetite.
- For diabetics: uncontrolled blood sugars.

If you experience symptoms or changes in your body that have not been described above but worry you, or if any symptoms are severe, contact:

_____ at telephone number _____

If you have symptoms that are severe or need emergency services, go to your local hospital's Emergency Department.