

## For the Patient: LUOTPAC

Other Names: Treatment of Thymoma with Cisplatin, Doxorubicin and Cyclophosphamide

**LU = LU**ng

**OT = Other Thoracic:** Thymoma/Thymic Carcinoma

**P = CisPlatin**

**A = Doxorubicin (ADRIAMYCIN®)**

**C = Cyclophosphamide**

### **ABOUT THIS MEDICATION**

#### **What are these drugs used for?**

LUOTPAC is an intravenous (through the vein) drug treatment for Thymoma and Thymic Carcinoma. The goal of this treatment is to help control or shrink the cancer and some of the symptoms caused by it.

This treatment is offered to people who have good kidney function and a good performance status. Performance status is a measure of how well a person is able to perform their usual daily activities.

#### **How do these drugs work?**

Cisplatin is an anticancer drug that works by *preventing* the synthesis of DNA, RNA and proteins that are needed for cancer cells to divide.

Doxorubicin is an anticancer drug that works by *interfering* with the synthesis of DNA and RNA that are needed for cancer cells to divide.

Cyclophosphamide is an anticancer drug that works by *interfering* with the synthesis of DNA, RNA, and proteins that are needed for cancer cells to divide.

### **INTENDED BENEFITS**

This treatment is being given to destroy and/or limit the growth of cancer cells in your body. This treatment may improve your current symptoms, and delay or prevent new symptoms from starting.

### **LUOTPAC TREATMENT SUMMARY**

#### **How are these drugs given?**

- Your treatment plan consists of up to 8 chemotherapy “cycles”. Each cycle lasts 3 weeks (21 days).
- For each cycle, you will have three medications given to you intravenously (through the vein) on Day 1.

- Doxorubicin is given first, and is given as an injection.
- You will then be given extra fluids intravenously for one hour (60 minutes) before cisplatin. This is to help flush out your kidneys.
- Cisplatin is given second, and is given intravenously over one hour (60 minutes).
- Cyclophosphamide is given last, and is given intravenously over approximately one hour (20-60 minutes).

**What will happen when I get my drugs?**

- A blood test is done within one month of starting treatment.
- A blood test is also done before Day 1 of each cycle.
- The dose and timing of your chemotherapy may be changed based on your blood test results and/or other side effects.
- Your very first treatment will take longer than other treatments because a nurse will be reviewing the possible side effects of your chemotherapy 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 happens, so follow directions closely.

**LUOTPAC TREATMENT PROTOCOL**

**Start Date:** \_\_\_\_\_

**Cycle 1:**

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
<b>Blood Test</b> <b>Doxorubicin,</b> <b>Cisplatin,</b> <b>Cyclophosphamide</b>	No Chemo	No Chemo	No chemo	No chemo	No chemo	No chemo
Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14
No chemo	No chemo	No chemo	No chemo	No chemo	No chemo	No chemo
Day 15	Day 16	Day 17	Day 18	Day 19	Day 20	Day 21
No chemo	No chemo	No chemo	No chemo	No chemo	No chemo	No chemo

**This 21-day cycle will repeat up to 7 more times.**

## 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.

SERIOUS SIDE EFFECTS	How Common Is It?	MANAGEMENT
Your <b>white blood cells</b> will decrease after your treatment. They usually return to normal within 3 weeks. White blood cells protect your body by fighting bacteria (germs) that cause infection. When they are low, <b>you are at greater risk of having an infection.</b>	Very Common	To help prevent infection: <ul style="list-style-type: none"> <li>• Wash your hands often and always after using the bathroom.</li> <li>• Take care of your skin and mouth by gently washing regularly.</li> <li>• Avoid crowds and people who are sick.</li> <li>• Call your doctor <b>immediately</b> at the first sign of an <b>infection</b> such as fever (over 100°F or 38°C by an oral thermometer), chills, cough or burning when you pass urine.</li> </ul>
Your <b>platelets</b> may decrease after your treatment. Platelets help to make your blood clot when you hurt yourself. <b>You may bruise or bleed more easily than usual.</b>	Common	To help prevent bleeding problems: <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>• Brush your teeth gently with a soft toothbrush as your gums may bleed more easily. Maintain good oral hygiene. Avoid taking ASA (eg: ASPIRIN®) or ibuprofen (eg: ADVIL®), <i>unless prescribed by your doctor.</i></li> </ul>
Doxorubicin and cisplatin <b>burn</b> if they leak under the skin.	Rare	Tell your nurse or doctor <b>immediately</b> if you feel burning, stinging, or any other change while the drugs are being given.

SERIOUS SIDE EFFECTS	How Common Is It?	MANAGEMENT
<p><b>Allergic reactions</b> to cisplatin may rarely occur. Signs of an allergic reaction are dizziness, confusion and wheezing. This reaction may occur immediately or several hours after receiving cisplatin. This reaction can occur after the first dose of cisplatin or after many doses of cisplatin.</p>	<p>Rare</p>	<p>Tell your nurse if this happens while you are receiving cisplatin or contact your oncologist immediately if this happens after you leave the clinic.</p>

OTHER SIDE EFFECTS	How Common Is It?	MANAGEMENT
<p><b>Nausea and vomiting</b> may occur after your treatment. It usually ends within 24 hours, but may last longer for some patients (i.e. delayed nausea and vomiting).</p>	<p>Very Common</p>	<p>You will be given a prescription for anti-nausea drug(s) to take before your chemotherapy treatment and/or at home. It is easier to prevent nausea than to treat it once it has happened, so follow directions closely.</p> <ul style="list-style-type: none"> <li>• Drink plenty of liquids.</li> <li>• Eat and drink often in small amounts.</li> <li>• Try the ideas in <i>“Food Choices to Control Nausea”</i>.</li> </ul> <p>Your doctor may manage delayed nausea and vomiting differently. Be sure to let your doctor know if you experience this.</p>

<p><b>Hair loss</b> is common and may begin within a few days or weeks of treatment. Your hair may thin or you may become totally bald. Your scalp may feel tender. You may lose hair on your face and body. Your hair will grow back once your treatments are over and sometimes between treatments. Colour and texture may change.</p>	<p>Very Common</p>	<ul style="list-style-type: none"> <li>• Use a gentle shampoo and soft brush.</li> <li>• Care should be taken with use of hair spray, bleaches, dyes, and perms.</li> <li>• Protect your scalp with a hat, scarf or wig in cold weather.</li> <li>• Cover your head or apply sunblock on sunny days.</li> <li>• Apply mineral oil to your scalp to reduce itching.</li> <li>• If you lose your eyelashes and eyebrows, protect your eyes from dust and grit with a broad-rimmed hat and glasses.</li> </ul>
<p><b>Sore mouth</b> may occur a few days after treatment. Mouth sores can occur on the tongue, the sides of the mouth or in the throat. <i>Mouth sores or bleeding gums can lead to an infection.</i></p>	<p>Common</p>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Make a mouthwash with ½ teaspoon baking soda or salt in 1 cup warm water and rinse several times a day.</li> <li>• Try soft, bland foods like puddings, milkshakes and cream soups.</li> <li>• Avoid spicy, crunchy or acidic food, and very hot or cold foods.</li> <li>• Call your doctor if you are having difficulty eating or drinking due to pain.</li> <li>• Try the ideas in “<i>Help with Sore Mouth during Chemotherapy</i>”</li> </ul>
<p><b>Diarrhea</b> may occur.</p>	<p>Common</p>	<p>To help diarrhea:</p> <ul style="list-style-type: none"> <li>• Drink plenty of liquids.</li> <li>• Eat and drink often in small amounts.</li> <li>• Avoid high fibre foods as outlined in “<i>Food Ideas to Help with Diarrhea</i>”.</li> </ul>

<b>Loss of appetite and weight loss</b> are common and may persist after your treatments are over.	Common	<ul style="list-style-type: none"> <li>Try ideas in “<i>High Energy High Protein Ideas</i>” and in “<i>Healthy Eating Using High Energy, High Protein Foods</i>”.</li> </ul>
<b>Pain or tenderness</b> may occur where the needle was placed in your vein.	Uncommon	<ul style="list-style-type: none"> <li>Apply cool compresses or soak in cool water for 15-20 minutes several times a day.</li> </ul>
<b>Nasal congestion</b> may occur during administration of cyclophosphamide. You may experience runny eyes and nose, sinus congestion and sneezing during or immediately after the infusion.	Uncommon	<ul style="list-style-type: none"> <li>For persistent nasal congestion a decongestant such as pseudoephedrine (e.g., SUDAFED®), or a decongestant/antihistamine can be used to relieve symptoms.</li> </ul>
Your <b>skin may darken</b> in some areas such as your nails, soles or palms.	Uncommon	<ul style="list-style-type: none"> <li>This will slowly return to normal once you stop treatment.</li> </ul>
<b>Headache</b> may occur.	Uncommon	<ul style="list-style-type: none"> <li>For minor pain, take acetaminophen (e.g., TYLENOL®).</li> </ul>

## **INSTRUCTIONS FOR THE PATIENT**

### **What other drugs can interact with LUOTPAC?**

- Other drugs such as some antibiotics given by vein (e.g., tobramycin, vancomycin), furosemide (LASIX®), phenytoin (DILANTIN®), pyridoxine, allopurinol, amiodarone, digoxin (LANOXIN®), hydrochlorothiazide, indomethacin (INDOCID®), warfarin (COUMADIN®) and cyclosporine (NEORAL® or SANDIMMUNE®) may interact with LUOTPAC. Tell your doctor if you are taking these or other drugs as you may need extra blood tests, your dose may need to be changed or your treatment may need to be held for a few days.
- Check with your doctor or pharmacist before you start taking any new prescription or non-prescription drugs.

### **Other important things to know:**

- Heart failure: rarely, doxorubicin can have a serious effect on the heart, causing failure of the heart's pumping action, which results in shortness of breath, fatigue and leg swelling. Your treatment may be stopped or interrupted if there are concerns about your heart function.
- Tell your doctor if you have ever had an unusual or allergic reaction to daunorubicin, epirubicin, idamycin, mitomycin or mitoxantrone before treatment begins.
- Your doctor may tell you to drink plenty of liquids (e.g., 8-12 cups or 2000-3000mL) every day. You may also be told to empty your bladder (pass urine) frequently, every 2 hours while you are awake and at bedtime for at least 24 hours after your treatment. Your doctor may also tell you to get up in the night to empty your bladder. This helps prevent bladder and kidney problems.
- Your urine may be pink or reddish for 1-2 days after your treatment. This is expected as doxorubicin is red and is passed in your urine.
- The drinking of alcohol (in small amounts) does not appear to affect the safety or usefulness of this treatment.
- Sometimes, the nerve which allows you to hear can be affected by cisplatin. This could result in you experiencing "tinnitus" (ringing in the ears) or a change in your hearing. Report any of these problems to your doctor and/or nurse.
- Cisplatin can cause changes in kidney function, but this is not frequent with the doses used in this type of treatment. It is important that you are well-hydrated before and after treatment.
- This treatment may cause sterility in men and menopause in women. If you plan to have children, discuss this with your doctor before starting treatment.
- This treatment may damage sperm and may cause harm to the baby if used during pregnancy. It is best to use birth control while you are undergoing treatment. Tell your doctor right away if you or your partner becomes pregnant. Do not breast feed during treatment.
- Tell all doctors or dentists you see that you are being treated with cyclophosphamide, doxorubicin and cisplatin before you receive treatment of any form.

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

- 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 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.
- Signs of **heart problems** such as fast or uneven heartbeat, chest pain, chest pressure, shortness of breath or difficulty breathing, swelling of ankles or fainting.
- Signs of a **stroke** such as sudden onset of: severe headache, eyesight changes, slurred speech, loss of coordination, weakness or numbness in arm or leg.
- Signs of a **blood clot** such as tenderness or hardness over a vein, calf swelling and tenderness, sudden onset of cough, chest pain or shortness of breath.
- **Seizures** or **loss of consciousness**.

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

- **Muscle weakness.**
- Signs of **bladder problems** such as changes in urination, painful burning sensation, presence of blood or abdominal pain.
- Signs of **anemia** such as unusual tiredness or weakness.
- Signs of **gout** such as joint pain.
- **Changes in eyesight.**
- Signs of **kidney problems** such as lower back or side pain, swelling of feet.
- Uncontrolled **nausea, vomiting, or diarrhea.**

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

- Easy bruising or bleeding.
- Redness, swelling, pain or sores where the needle was placed.
- Redness, swelling, pain or sores on your lips, tongue, mouth or throat.
- Ringing in your ears or hearing problems.
- Signs of anemia such as unusual tiredness or weakness.
- Skin rash or itching.
- Numbness or tingling in feet or hands or painful leg cramps.
- For diabetics: uncontrolled blood sugars.
- Headache not controlled with acetaminophen.

**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 \_\_\_\_\_