



Provincial Health Services Authority

## For the Patient: LUMMPG (Carboplatin Option)

Other Names: Treatment of Malignant Mesothelioma with Carboplatin and Gemcitabine

**LU = LU**ng

**MM = Malignant Mesothelioma**

**PG = CarboPlatin, Gemcitabine**

### **ABOUT THIS MEDICATION**

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

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

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

Carboplatin is an anticancer drug that works by *preventing* the synthesis of DNA that is needed for cancer cells to divide.

Gemcitabine is an anticancer drug that works by *preventing* the synthesis and repair of DNA that is needed for cancer cells to divide.

### **INTENDED BENEFITS**

This treatment is being given to destroy and/or slow down the growth of cancer cells in your body. This treatment may improve your current symptoms, and delay or prevent new symptoms from starting. This chemotherapy treatment can also help with controlling some of the symptoms the cancer may be causing, such as pain, coughing, wheezing, difficulty swallowing, weight loss and fatigue. Research has shown that patients may live longer after receiving chemotherapy treatment.

### **LUMMPG TREATMENT SUMMARY**

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

- Your treatment plan consists of up to 6 chemotherapy “cycles”. Each cycle lasts 3 weeks (21 days).
- For each cycle, you will have two medications given to you intravenously (through the vein) on Day 1.
  - Carboplatin is given intravenously over half-an-hour (30 minutes).
  - Gemcitabine is given intravenously over half-an-hour (30 minutes).
- On Day 8 of each cycle, you will only be given gemcitabine, intravenously, over half-an-hour (30 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 and Day 8 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.

**LUMMPG TREATMENT PROTOCOL**

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

**Cycle 1:**

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
<b>Blood test, Carboplatin, Gemcitabine</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
<b>Blood test, Gemcitabine</b>	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 5 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
<p>Your <b>white blood cells</b> may decrease after your treatment. They usually return to normal in 2-3 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></p>	<p>Very common</p>	<p>To help prevent infection:</p> <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><i>immediately</i></b> at the first sign of an <b><i>infection</i></b> such as fever (over 100°F or 38°C by an oral thermometer), chills, cough or burning when you pass urine.</li> </ul>
<p>Your <b>platelets</b> may decrease after your treatment They will return to normal in 2-3 weeks. Platelets help to make your blood clot when you hurt yourself. <b>You may bruise or bleed more easily than usual.</b></p>	<p>Common</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>Avoid taking ASA (eg: ASPIRIN®) or Ibuprofen (eg: ADVIL®), <i>unless prescribed by your doctor.</i></p>

OTHER SIDE EFFECTS	How Common Is It?	MANAGEMENT
<p><b>Nausea and vomiting</b> may occur after your treatment and may last for 24 hours. It is usually mild to moderate.</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>Be sure to let your doctor know if you have nausea or vomiting later than 24 hours after your treatment.</p>
<p><b>Tiredness</b> or lack of energy may occur.</p>	<p>Very Common</p>	<ul style="list-style-type: none"> <li>• Do not drive a car or operate machinery if you are feeling tired.</li> <li>• Try the ideas in <i>“Your Bank of Energy Savings: How People with Cancer can Handle Fatigue”</i>.</li> <li>•</li> </ul>
<p>A <b>flu-like illness</b> may occur shortly after your treatment. You may have fever, chills, headache, muscle and joint aches. Flu-like symptoms usually disappear on their own.</p>	<p>Common</p>	<ul style="list-style-type: none"> <li>• Take acetaminophen (TYLENOL®) every 3-4 hours if needed.</li> <li>• Fever and chills which occur more than 48 hours after treatment may be signs of an infection. They should be reported to the doctor immediately.</li> </ul>
<p><b>Skin rash</b> may occur after treatment. It is usually mild and is found on the arms, legs, chest, back or stomach. It may or may not be itchy.</p>	<p>Common</p>	<ul style="list-style-type: none"> <li>• Apply hydrocortisone cream 0.5% sparingly 3-4 times daily.</li> </ul>
<p><b>Pain or tenderness</b> may occur where the needle was placed in your vein.</p>	<p>Common</p>	<ul style="list-style-type: none"> <li>• Apply cool compresses or soak in cool water for 15-20 minutes several times a day.</li> <li>• For pain, take acetaminophen (eg: TYLENOL®).</li> </ul> <p><i>See your doctor if the pain continues to bother you.</i></p>

OTHER SIDE EFFECTS	How Common Is It?	MANAGEMENT
<b>Swelling</b> of hands, feet or lower legs may occur if your body retains extra fluid	Common	<ul style="list-style-type: none"> <li>• If swelling is a problem:               <ul style="list-style-type: none"> <li>○ Elevate your feet when resting</li> <li>○ Avoid tight clothing</li> </ul> </li> </ul>
<b>Hair loss</b> sometimes occurs. If there is hair loss, your hair will grow back once you stop treatment. Colour and texture may change.	Uncommon	<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>• Refer to the pamphlet: For the Patient: <i>“Hair loss due to chemotherapy”</i></li> </ul>
<b>Diarrhea</b> may occur.	Uncommon	<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 during Chemotherapy”</i>.</li> </ul>

## **INSTRUCTIONS FOR THE PATIENT**

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

- Other drugs such as phenytoin (Dilantin®) and warfarin (Coumadin®) may interact with LUMMPG. 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:**

- The drinking of alcohol (in small amounts) does not appear to affect the safety or usefulness of this 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 being treated with carboplatin and gemcitabine 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 or pinpoint red spots on skin.
- Signs of an **allergic reaction** (rare) soon after a treatment including dizziness, fast heart beat, face swelling or breathing problems.
- Signs of **heart problems** such as fast or uneven heartbeat.
- Signs of **lung problems** such as shortness of breath or difficulty breathing.

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

- Ringing in your ears or **hearing problems**.
- **Changes in eyesight**.
- Signs of **kidney problems** such as lower back or side pain, swelling of feet or lower legs.
- Signs of **anemia** such as unusual tiredness or weakness.
- Signs of **liver problems** such as yellow eyes or skin, white or clay-coloured stools.

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

- Easy bruising or bleeding.
- Uncontrolled nausea, vomiting, constipation or diarrhea.
- Severe jaw pain or headache.
- Redness, swelling, pain or sores where the needle was placed or along the arm.
- Redness, swelling, pain or sores on your lips, tongue, mouth or throat.
- Skin rash or itching.
- Excessive drowsiness.
- Aches and pains.

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