

## For the Patient: GUBDDMVAC

Other Names: BC Cancer Protocol Summary for Neoadjuvant Treatment Of Urothelial Cancer using Dose-Dense Methotrexate, Vinblastine, Doxorubicin and Cisplatin

**GU = GenitoUrinary**

**B = Bladder**

**D = Dose**

**D = Dense**

**M = Methotrexate**

**V = Vinblastine**

**A = Adriamycin (doxorubicin)**

**C = Cisplatin**

### **ABOUT THIS MEDICATION**

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

- Methotrexate, vinblastine, doxorubicin, and cisplatin are used to treat cancer in the lining of the bladder, kidney, and ureter (urothelial cancer).

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

- Methotrexate (meth oh trex' ate), vinblastine (vin blas' teen), doxorubicin (dox-oh-ROO-biss-in) and cisplatin (sis-PLAT-in) work together to limit the growth of cancer.

### **INTENDED BENEFITS**

- These drugs interfere with the genetic material of replicating cells and prevent an increase in the number of cancer cells.

### **TREATMENT SUMMARY**

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

- Each medication will be given directly into the vein, intravenously (IV).
- The treatment will be given in 'cycles'. Each cycle length is 2 weeks. Treatment is usually planned for four cycles of treatment, but some patients may receive up to six cycles. The number of cycles you receive will be determined by your oncologist.
- Methotrexate is given on Day 1.
- Vinblastine, doxorubicin, and cisplatin are given on Day 2. Sometimes cisplatin is divided into two doses and given on both Days 1 and 2.
- You will be given extra fluids (hydration) intravenously for one hour before cisplatin. This is to help flush out your kidneys.
- Treatment will take from one hour to 3 and a half hours for each day of treatment.

**The calendar on the next page outlines your treatment plan.**

- **If cisplatin is given as one single dose on Day 2:**

C Y C L E	DATE	TREATMENT PLAN
1		Week 2 → no treatment

**OR**

- **If cisplatin is divided and given over two days on Days 1 and 2:**

C Y C L E	DATE	TREATMENT PLAN
1		Week 2 → no treatment

- **This treatment will continue every 2 weeks until treatment is completed, as determined by your oncologist.**

### **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 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 will 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.
- You will be given a prescription for filgrastim (also known as G-CSF, granulocyte colony stimulating factor) to improve your white blood cell count. White blood cells help protect your body by fighting bacteria (germs) that cause infection.

- Filgrastim is given as an injection under the skin (subcutaneously) once daily for approximately 7 days, starting on Day 4 of each cycle (Day 1= first day of treatment). Your nurse will teach you and/or a family member how to give the injection. The filgrastim prescription is filled at your community pharmacy and your pharmacy may need 1 to 2 days to obtain the drug.
- Your doctor may ask you to take a hearing test before and during treatment with cisplatin. This helps to detect hearing problems.
- You may be asked to drink water on the morning of your treatment (2-3 cups). Following your treatment your doctor may ask you to drink plenty of liquids (8-12 cups a day). This helps prevent kidney problems.

### **INSTRUCTIONS:**

- Tell your doctor if you have ever had an unusual or **allergic reaction** to methotrexate, vinblastine, doxorubicin, cisplatin, or any drugs before starting this treatment.
- **Alcohol** may increase the risk of liver problems with methotrexate and should be avoided.
- This treatment can 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 harm the baby if used during pregnancy. It is best to use **birth control** while being treated with these drugs. Tell your doctor right away if you become pregnant. **Do not breastfeed** during treatment.
- Tell doctors, dentists and other health professionals that you are being treated with methotrexate, vinblastine, doxorubicin, and cisplatin before you receive any treatment from them.

### **Medication Interactions:**

- Other drugs may **interact** with methotrexate, vinblastine, doxorubicin, and cisplatin. Tell a member of your healthcare team if you are taking any other drugs as you may need extra blood tests or your dose(s) may need to be changed. Check with your doctor or pharmacist before you start or stop taking any new drugs including all prescription and non-prescription medicines, steroids or other medicines that lower your immune response, vitamins, and herbal supplements.

### **SIDE EFFECTS AND WHAT TO DO ABOUT THEM**

Your doctor will review the risks of treatment and possible side effects with you before starting treatment.

Side effects that can occur with these medications are listed in the following table. Tips to help manage the side effects are included.

SIDE EFFECTS	MANAGEMENT
<p><b>Allergic reactions</b> to cisplatin may rarely occur. Signs of an allergic reaction are dizziness, confusion and wheezing. This reaction can occur immediately or several hours after receiving treatment.</p> <p>This reaction can occur after the first dose of cisplatin or after many doses of cisplatin.</p>	<p>Tell your nurse if this happens while you are receiving treatment or contact your oncologist <b>immediately</b> if this happens after you leave the clinic.</p>
<p>Vinblastine, cisplatin, and doxorubicin <b>burn</b> if they leak under the skin.</p>	<p>Tell your nurse or doctor <b>immediately</b> if you feel burning, stinging, or any other change while the drug is being given.</p>
<p>Your <b>white blood cells</b> may decrease after your treatment. They usually return to normal after your last treatment. 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>To help prevent infection:</p> <ul style="list-style-type: none"> <li>• Wash your hands often and always after using the bathroom.</li> <li>• Avoid crowds and people who are sick.</li> </ul> <p>Call your healthcare team <b>immediately</b> 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>
<p>Your <b>platelets</b> may decrease after your treatment. They usually return to normal after your last treatment. Platelets help to make your blood clot when you hurt yourself. <b>You may bruise or bleed more easily than usual.</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> </ul> <p>For minor pain, try acetaminophen (e.g., TYLENOL®) first, to a maximum of 4 g (4000 mg) per day.</p>
<p><b>Pain or tenderness</b> 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><b>Fever</b> and <b>chills</b> may occur shortly after treatment with methotrexate. Fever should last no longer than 24 hours.</p>	<ul style="list-style-type: none"> <li>• Take acetaminophen (e.g., TYLENOL®) every 4-6 hours, to a maximum of 4 g (4000 mg) per day.</li> <li>• 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 <b>immediately</b>.</li> </ul>
<p><b>Nausea</b> and <b>vomiting</b> may occur after your treatment. If you are vomiting and it is not controlled, you can quickly become dehydrated.</p>	<p>You will be given a prescription for antinausea drug(s) to take before your treatment and at home. <b>It is easier to prevent nausea than treat it once it has occurred</b>, so follow directions closely.</p> <ul style="list-style-type: none"> <li>• Drink plenty of fluids.</li> <li>• Eat and drink often in small amounts.</li> <li>• Try the ideas in <i>Practical Tips to Manage Nausea</i>.* </li></ul> <p>Tell your healthcare team if nausea or vomiting continues or is not controlled with your antinausea drug(s).</p>
<p><b>Diarrhea</b> may 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"> <li>• Drink plenty of fluids.</li> <li>• Eat and drink often in small amounts.</li> <li>• Avoid high fibre foods as outlined in <i>Food Choices to Help Manage Diarrhea</i>.* </li></ul> <p>Tell your healthcare team if you have diarrhea for more than 24 hours.</p>
<p><b>Constipation</b> may occur.</p>	<ul style="list-style-type: none"> <li>• Exercise if you can.</li> <li>• Drink plenty of fluids.</li> </ul> <p>Try the ideas in <i>Food Choices to Manage Constipation</i>.*</p>
<p>Your <b>urine may be pink or reddish</b> for 1-2 days after your treatment.</p>	<p>This is expected as doxorubicin is red and is passed in your urine.</p>

SIDE EFFECTS	MANAGEMENT
<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. <b>Mouth sores or bleeding gums can lead to an infection.</b></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 ¼ teaspoon baking soda AND ¼ teaspoon salt in 1 cup warm water and rinse several times a day.</li> </ul> <p>Try the ideas in <i>Food Ideas to Try with a Sore Mouth</i>.*</p>
<p><b>Loss of appetite and weight loss</b> can occur and may persist after discontinuation of treatment.</p>	<p>Try the ideas in <i>Food Ideas to Help with Decreased Appetite</i>.*</p>
<p><b>Muscle or joint pain</b> may occur a few days after your treatment.</p>	<p>You may take acetaminophen (e.g., TYLENOL®) every 4-6 hours to a maximum of 4 g (4000 mg) per day. Tell your healthcare team if the pain interferes with your activity.</p>
<p><b>Headache or jaw pain</b> may occur.</p>	<p>Take acetaminophen (e.g., TYLENOL®) every 4-6 hours if needed, to a maximum of 4 g (4000 mg) per day.</p>
<p><b>Skin rashes</b> may occur.</p>	<p>If itching is very irritating, call your healthcare team. Otherwise, be sure to mention it at your next visit.</p>
<p>Your <b>skin may darken</b> in some areas such as your hands, elbows, and knees.</p>	<p>This will slowly return to normal once you stop treatment.</p>
<p>Your <b>skin may sunburn</b> more easily than usual.</p>	<ul style="list-style-type: none"> <li>• Tell your healthcare team if you have a severe sunburn or skin reaction such as itching, rash, or swelling after sun exposure.</li> </ul> <p>Refer to <i>Your Medication Sun Sensitivity and Sunscreens</i>* or the <i>BC Health Guide</i> for more information.</p>
<p><b>Tiredness</b> and lack of energy may occur.</p>	<ul style="list-style-type: none"> <li>• Do not drive a car or operate machinery if you are feeling tired.</li> </ul> <p>Try the ideas in <i>Fatigue/Tiredness – Patient Handout</i>.*</p>

SIDE EFFECTS	MANAGEMENT
<p><b>Numbness or tingling of the fingers or toes</b> may occur. This will slowly return to normal once your treatments are over. This may take several months.</p>	<ul style="list-style-type: none"> <li>• Be careful when handling items that are sharp, hot, or cold.</li> <li>• Be careful when walking on uneven surfaces or doing activities that need you to balance or be steady.</li> <li>• Tell your healthcare team at your next visit if you have trouble with buttons, writing, picking up small objects, walking, or have fallen.</li> </ul>
<p><b>Hair loss</b> is common with doxorubicin treatment 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.</p> <p>Hair loss sometimes occurs with vinblastine use, and is rare with methotrexate and cisplatin.</p>	<p>Refer to <i>Resources for Hair Loss and Appearance Changes – Patient Handout</i>.*</p> <p>You may also want to:</p> <ul style="list-style-type: none"> <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-brimmed hat and glasses.</li> </ul>

**\*Please ask a member of your healthcare team for a copy.**

**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; 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 or tarry stools, blood in urine, pinpoint red spots on skin, or extensive bruising.
- Signs of an **allergic reaction** (rare) soon after a treatment including dizziness, fast heartbeat, face swelling, or breathing problems.
- 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 feet or lower legs, 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 **fainting**.
- Sudden **abdominal pain** or tenderness.

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

- Signs of **anemia** such as unusual tiredness or weakness.
- **Constipation** that is not relieved by stool softeners and laxatives.
- Severe **skin reaction** where you have had radiation.
- Ringing in your ears or **hearing problems**.
- Signs of **bladder problems** such as changes in urination, painful burning sensation, presence of blood, or abdominal pain. Sore throat mouth
- Signs of **liver problems** such as yellow eyes or skin, white or clay-coloured stools.
- Signs of **kidney problems** such as lower back or side pain, swelling of feet or lower legs.
- **Changes in eyesight**.
- Signs of **gout** such as joint pain.
- Uncontrolled nausea, vomiting, or diarrhea.

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