



Provincial Health Services Authority

For the Patient: GUVIP2

Consolidation and Salvage Therapy for Nonseminoma
Using Etoposide, CISplatin, Ifosfamide, Mesna

GU = Genito**U**rinary (tumour group)

V = **V**epesid (etoposide)

I = **I**fosfamide

P = cis**P**latin

ABOUT THIS MEDICATION

What are these drugs used for?

- Etoposide, cisplatin and ifosfamide are used to treat non-seminoma tumours (cancer of the sperm or egg cells).
- Mesna is a medication used to protect the bladder from the side effects of ifosfamide.

How do these drugs work?

- Etoposide (ee-TOP-aw-side), cisplatin (sis-PLAT-in), and ifosfamide (eye fos' fa mide) work by interfering with the genetic material of replicating cells and preventing an increase in the number of cancer cells.
- **Mesna (mes' na) works by making the breakdown product of ifosfamide less harmful to the bladder.**

INTENDED BENEFITS

- This therapy 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 the onset of new symptoms.
- It may take several treatments before your doctor can judge whether or not this treatment is helping.

TREATMENT SUMMARY

How are these drugs given?

- The days when you are receiving etoposide, cisplatin, ifosfamide, and mesna, together with the days-off after them, may be referred to as a "cycle".
- **Etoposide** and **cisplatin** are given into a vein (intravenously, IV) on days 1, 2, 3, 4, and 5.
- **Ifosfamide** and **mesna** are given into the vein (IV) on days 1, 2, 3, and 4.
- After 3 weeks from day 1 this cycle will start again. You will go through multiple cycles depending on your response to treatment and/or the side effects you experience.

The calendar below outlines your overall treatment plan for each cycle.

GUVIP2 Treatment Protocol

Start Date: _____

Cycle 1:

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Etoposide Cisplatin Mesna Ifosfamide	Etoposide Cisplatin Mesna Ifosfamide	Etoposide Cisplatin Mesna Ifosfamide	Etoposide Cisplatin Mesna Ifosfamide	Etoposide Cisplatin	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 1 to 3 more times as determined by your oncologist

What will happen when I get my drugs?

- A blood test will be taken before starting treatment and before each cycle. The blood test may also be repeated at anytime during treatment. The dose and timing of your chemotherapy may be changed based on the results of the blood tests 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 anti-nausea medications before 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. You will be given a prescription for anti-nausea medications (to be filled at your regular pharmacy). It is easier to prevent nausea than to treat it once it has occurred, so follow directions closely.
- It is important that you increase your fluid intake throughout the treatment period. Drink lots of fluids for a few days before, the day of and a couple of days after each chemotherapy day (at least 6-8 cups a day). Avoid taking any medications such as ibuprofen (e.g. Advil®), ASA (e.g. ASPIRIN®) on the day that you will be receiving cisplatin, as it may impact the rate that cisplatin is eliminated from the body and increase risk of kidney problems.
- Etoposide can cause allergic reaction in some patients. If this happens, you may be treated with etoposide phosphate (ETOPOPHOS®) instead. Etoposide phosphate would be given to you in the same way as etoposide, as discussed above.

MEDICATION INTERACTIONS

- Other drugs such as some antibiotics (e.g., tobramycin, vancomycin given by vein), and furosemide (LASIX®), phenytoin (DILANTIN®) and pyridoxine may **interact** with cisplatin. Drugs such as atovaquone (MEPRON®), warfarin (COUMADIN®), glucosamine and St John's Wort may **interact** with etoposide. Warfarin may also interact with ifosfamide. Tell your doctor if you are taking the above or any other drugs, as you may need extra blood tests or your dose may need to be changed. Check with your doctor or pharmacist before you start or stop taking any new drugs.

During or after treatment:

- **Hearing Problems:** Your doctor may tell you to take a **hearing test** before and at various times during your treatment with cisplatin. This helps detect hearing problems..
- **Kidney Dysfunction:** Cisplatin can cause changes in kidney function, but this is not frequent with the doses used in this regimen. It is important that you are well-hydrated before and after treatment, to help avoid kidney damage from cisplatin. Call your treatment centre if you having difficulties with nausea, vomiting, or diarrhea after treatment, as you may need intravenous fluids and medications to help you through. Your doctor will check your blood prior to each treatment cycle, to make sure no significant damage is occurring to your kidneys from this drug.
- Cisplatin, etoposide, etoposide phosphate, and ifosfamide may cause sterility in men and menopause in women. If you plan to have children, discuss this with your doctor before treatment.
- Cisplatin, etoposide, etoposide phosphate, and ifosfamide may damage sperm and may harm the baby if used during pregnancy. It is best to use birth control while being treated with etoposide. Tell your doctor right away if you or your partner becomes pregnant. Do not breast feed during treatment.

SIDE EFFECTS AND WHAT TO DO ABOUT THEM

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

SIDE EFFECTS	MANAGEMENT
<p>Allergic reactions may rarely occur. Signs of an allergic reaction may include flushing, rash, itching, dizziness, swelling or breathing problems.</p> <p>This can occur immediately or several hours after receiving treatment.</p>	<p>Tell your nurse if this happens while you are receiving treatment or contact your oncologist immediately if this happens after you leave the clinic.</p>

SIDE EFFECTS	MANAGEMENT
Etoposide, etoposide phosphate , cisplatin, ifosfamide, and mesna burn if they leak under the skin.	Tell your nurse or doctor <i>immediately</i> if you feel burning, stinging or any other change while the drug is being given.
Pain or tenderness may occur where the needle was placed.	Apply cool compresses or soak in cool water for 15-20 minutes several times a day.
Your white blood cells 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, you are at greater risk of having an infection.	To help prevent infection: <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 <i>immediately</i> 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.
Your platelets 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. You may bruise or bleed more easily than usual.	To help prevent bleeding problems: <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. Maintain good oral hygiene. Some medications such as ASA (e.g., ASPIRIN®) or ibuprofen (e.g., ADVIL®) may increase your risk of bleeding. <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). For minor pain, try acetaminophen (e.g., TYLENOL®) first, to a maximum of 4 g (4000 mg) per day
Numbness or tingling of the fingers or toes may occur. This will slowly return to normal once your treatments are over. This may take several months	<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.

SIDE EFFECTS	MANAGEMENT
<p>Nausea and vomiting 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/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 Practical Tips to Manage Nausea.* • Tell your healthcare team if nausea or vomiting continues or is not controlled with your antinausea drug(s).
<p>Tiredness and lack of energy may occur.</p>	<ul style="list-style-type: none"> • Try the ideas in Your Bank of Energy Savings: How People with Cancer Can Handle Fatigue. • Let your doctor or nurse know if you continue to feel more tired than usual. <p>Your energy level will improve with time after treatment is completed.</p>
<p>Dizziness or feeling faint may occur during administration of IV etoposide.</p>	<ul style="list-style-type: none"> • Tell your nurse or doctor immediately. • Lie down or sit with your feet elevated.
<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</p>	<p>Refer to Resources for Hair Loss and Appearance Changes – Patient Handout.*</p> <p>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.
<p>Loss of appetite and weight loss may occur and may persist after discontinuation of treatment.</p>	<p>Try the ideas in Food Ideas to Help with Decreased Appetite.*</p>
<p>Taste alteration may occur.</p>	<p>Try the ideas in Food Ideas to Cope with Taste and Smell Changes.*</p>
<p>Diarrhea 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"> • Drink plenty of fluids. • Eat and drink often in small amounts. • Avoid high fibre foods as outlined in Food Choices to Help Manage Diarrhea.* <p>Tell your healthcare team if you have diarrhea for more than 24 hours.</p>

SIDE EFFECTS	MANAGEMENT
Constipation may occur.	<ul style="list-style-type: none"> • Exercise if you can. • Drink plenty of fluids. <p><i>Try the ideas in Food Choices to Manage Constipation.</i>*</p>
Sore mouth may 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.	<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. • <i>Try the ideas in Food Ideas to Try with a Sore Mouth.</i>*
Blood in the urine may occur with ifosfamide.	<ul style="list-style-type: none"> • Report this to your doctor immediately. • Drink plenty of fluids, as directed by your doctor. • Urinate as often as possible.

* 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 **allergic reaction** (rare) soon after a treatment including dizziness, fast heart beat, face swelling, abdominal pain or breathing problems.
- 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 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.
- 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 **bladder problems** such as changes in urination, painful burning sensation, presence of blood, or abdominal pain.
- Signs of **bleeding problems** such as black, tarry stools; blood in urine; pinpoint red spots on skin; extensive bruising.
- **Seizures** or **loss of consciousness**.
- **Confusion, extreme tiredness or restlessness, or hallucinations** (seeing, hearing, or feeling things that are not there).

- Severe **abdominal pain**.
- Repeated **vomiting** and cannot keep fluids or medications down.

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 _____