

For the Patient: SAAVVPOIT

Other Names: Treatment of Recurrent/Refractory Ewing Sarcoma using Vincristine, Temozolomide and Oral Irinotecan

SA = **SA**rcoma
AV = **AdV**anced
V = **V**incristine
POI = **O**ral **I**rinotecan
T = **T**emozolomide

ABOUT THIS TREATMENT

What are these medications used for?

- SAAVVPOIT is a chemotherapy treatment for Ewing sarcoma. This therapy is being given to destroy and/or limit the growth of cancer cells in your body. It may improve your current symptoms, and delay or prevent the onset of new ones.

How do these medications work?

- Vincristine works by interrupting processes that are needed for cancer cells to divide.
- Irinotecan works by interfering with dividing cells and preventing an increase in the number of cancer cells.
- Temozolomide kills cancer cells by preventing their normal cell division and growth.

TREATMENT SUMMARY

How are these medications given?

- Your treatment consists of 'cycles', which will continue as long as the treatment remains effective and the side effects are manageable.
- Each cycle lasts 3 weeks (21 days).
- For each cycle you will receive 3 medications: temozolomide, vincristine and irinotecan.
- Vincristine is given by injection into the vein (referred to as intravenously, or IV). This IV injection is given over 15 minutes on Day 1 of each cycle.
- Temozolomide is a capsule taken by mouth once daily for 5 days (on Days 1 to 5 of each cycle). You may be given capsules of more than one strength to make the right dose. The BC Cancer pharmacy may package these capsules in a blister pack to make it easier for you to take.
 - Temozolomide may be taken with food or on an empty stomach with a glass of water or juice. It is best to take your dose at the same time each day relative to when you eat (i.e., try not to take it with a meal one day, and on an empty stomach the next day). Taking your dose on an empty stomach (at least one hour before or after you eat) may help reduce nausea.
 - Swallow the capsules whole. Do not open or chew the capsules.
 - If you vomit after taking temozolomide, do not take a second dose. Call your healthcare team during office hours for advice.

- Irinotecan is a clear liquid that is taken by mouth once daily for 5 days (on Days 1 to 5 of each cycle). The BC Cancer pharmacy will prepare irinotecan liquid in pre-measured oral syringes for you to take at home.
 - **Take** irinotecan on an empty stomach, **one hour after you take temozolomide**
 - **Dilute** each dose of irinotecan in a small glass of cranberry juice immediately before you take it. This helps to cover the unpleasant taste. Be sure to finish the entire dose.
 - If you **vomit** the dose of irinotecan within 1 hour of taking it, do not take a second dose. Call your healthcare team during office hours for advice. You will be told whether you need to take another dose.
 - **Store** irinotecan syringes out of the reach of children, **in the refrigerator**.

This calendar below outlines your overall treatment plan:

TREATMENT PLAN	
► Week 1 →	Vincristine IV on Day 1 Temozolomide by mouth once daily x 5 days (on Days 1 to 5) Irinotecan by mouth once daily x 5 days (on Days 1 to 5)
Week 2 →	No Treatment
Week 3 →	No Treatment

What will happen while I am being treated?

- You will have a blood test prior to Day 1 of each cycle. The dose and timing of your treatment may be changed based on your blood tests and/or other side effects.
- Your very first treatment will take longer than other treatments because a nurse will review 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 treatment appointment.
- To reduce the risk of developing diarrhea, you will be given a prescription for an antibiotic to take starting **2 days before Day 1 of each cycle**. You will also need to buy loperamide (IMMODIUM) at your regular pharmacy and follow instructions from your healthcare team on how to manage diarrhea.
- You will also 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 anti-nausea drugs at home after therapy. It is easier to prevent nausea than treat it once it has occurred, so follow directions closely.

INSTRUCTIONS FOR THE PATIENT

- Other medications may interact with your treatment. Check with your healthcare team before you start taking any new medications including all prescription and nonprescription medicines, vitamins, and herbal supplements.
- **Avoid grapefruit and grapefruit juice** for the duration of your treatment, as these may interact with irinotecan.
- The **drinking of alcohol** (in small amounts) does not appear to affect the safety or usefulness of your treatment.

- **Tell** doctors, dentists and other health professionals that you are being treated with chemotherapy before you receive any treatment from them.
- Temozolomide may cause sterility in men and menopause in women. If you plan to have children, discuss this with your treatment provider before being treated.
- Temozolomide, irinotecan and vincristine may damage sperm and may harm the baby if used during pregnancy. It is best to use **birth control** during your treatment. Ask your treatment provider how long you should continue using birth control after your treatment has ended. Tell your healthcare team right away if you or your partner becomes pregnant. Do not breastfeed.

SIDE EFFECTS AND WHAT TO DO ABOUT THEM

- **Unexpected and unlikely side effects can occur with any drug treatment. The ones listed below are particularly relevant to your treatment plan.**
- **Do not try to treat or diagnose symptoms yourself.** Getting medical treatment right away may keep the problem from becoming more serious.

SIDE EFFECTS	MANAGEMENT
Allergic reactions may rarely occur. Signs of an allergic reaction may include flushing, rash, itching, dizziness, swelling or breathing problems. This can occur immediately or several hours after receiving treatment.	Tell your nurse if this happens while you are receiving treatment or contact your healthcare team immediately if this happens after you leave the clinic.
Vincristine burns if it leaks under the skin.	Tell your nurse or doctor immediately 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 warm compresses or soak in warm water for 15-20 minutes several times a day.
Early diarrhea may occur during or shortly after an irinotecan treatment (within 24 hours). It starts with watery eyes, stomach cramps and sweating. If you have diarrhea and it is not controlled, you can quickly become dehydrated.	• Tell your nurse or doctor immediately if you have watery eyes, stomach cramps, or sweating during or after your treatment. • Early diarrhea is treated with a medication called atropine, which is injected under your skin. If your cancer centre is closed, your healthcare team may tell you to go to your Hospital Emergency for atropine treatment.

SIDE EFFECTS	MANAGEMENT
Late diarrhea may occur one day to several days after an irinotecan treatment. It starts with stools more loose or often than usual. If you have diarrhea and it is not controlled, you can quickly become dehydrated.	Late diarrhea must be treated <i>immediately</i> with loperamide 2 mg tablets (e.g., IMODIUM): • Take <i>TWO tablets</i> at the first sign of loose or more frequent stools than usual. • Then take <i>ONE tablet</i> every <i>TWO hours</i> until diarrhea has stopped for 12 hours. • At night, you may take <i>TWO tablets</i> every <i>FOUR hours</i> (set your alarm) during the time you usually sleep. This dose is much higher than the package directions. It is very important that you take this higher dose to stop the diarrhea. • Always keep a supply of loperamide (e.g., have 48 tablets on hand). You can buy loperamide at any pharmacy without a prescription. To help diarrhea: • Drink plenty of liquids. Drinks such as GATORADE or POWERADE are recommended to replace fluid & body salts. • Eat and drink often in small amounts. • Avoid high fiber foods as outlined in <i>Food Choices to Help Manage Diarrhea</i>.[*]A dietitian can give you more suggestions for dealing with diarrhea. Tell your healthcare team if diarrhea does not improve 24 hours after starting loperamide or lasts more than 36 hours.
Constipation often occurs and may be severe with vincristine.	• Avoid bulk-forming laxatives (e.g., METAMUCIL, PRODIEM). • Exercise if you can. • Drink plenty of fluids (8 cups a day). • Try ideas in <i>Food Choices to Manage Constipation</i>.[*] Tell your healthcare team if constipation occurs. Do not start taking laxatives until you talk to your healthcare team.

SIDE EFFECTS	MANAGEMENT
Your white blood cells will decrease after your treatment. They usually return to normal in time for your next 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: • Wash your hands often and always after using the bathroom. • Avoid crowds and people who are sick. • Stop taking irinotecan and temozolomide and call your healthcare team immediately at the first sign of an infection such as fever (over 100°F or 38°C by an oral thermometer), chills, cough, sore throat or burning when you pass urine.
Your platelets may decrease 3-4 weeks after your treatment. They usually return to normal within 2 weeks. 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: • 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. • 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, but occasional use of ibuprofen may be acceptable.
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.	• 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 ideas in <i>Food Ideas to Try with a Sore Mouth</i>.*

SIDE EFFECTS	MANAGEMENT
Nausea and vomiting may occur after your treatment and may last for 24 hours. If you are vomiting and it is not controlled, you can quickly become dehydrated.	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. • Drink plenty of liquids. • Eat and drink often in small amounts. • Try the ideas in <i>Practical Tips to Manage Nausea</i>.* Tell your healthcare team if nausea or vomiting continues or is not controlled with your anti-nausea medication(s).
Headache, jaw pain and/or muscle pain may occur.	Take acetaminophen (e.g., TYLENOL) every 4-6 hours if needed, 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.	• Be careful when handling items that are sharp, hot, or cold. Tell your healthcare team at your next visit, especially if you have trouble with buttons, writing, or picking up small objects.
Swelling of hands, feet or lower legs may occur if your body retains extra fluid.	If swelling is a problem: • Elevate your feet when sitting. Avoid tight clothing.
Sugar control may be affected in diabetics.	• Check your blood sugar regularly if you are diabetic.
Tiredness and lack of energy may occur.	• Do not drive a car or operate machinery if you are feeling tired. • Try the ideas in <i>Fatigue/Tiredness – Patient Handout</i>.*
Hair loss 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.	Refer to <i>Resources for Hair Loss and Appearance Changes – Patient Handout</i>.* You may also want to: • 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.**

STOP TAKING IRINOTECAN AND TEMOZOLOMIDE AND 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); chills; cough; pain or burning when you pass urine.
- **Diarrhea** that occurs within the first 24 hours after irinotecan treatment.
- Signs of **severe fluid loss** due to diarrhea such as fainting, light-headedness or dizziness.
- Signs of an **allergic reaction** (rare) soon after a treatment including dizziness, fast heartbeat, face swelling, or breathing problems.
- 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 **bleeding problems** such as black, tarry stools; blood in urine; pinpoint red spots on skin.
- 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.

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

- Severe **diarrhea** that occurs after the first 24 hours AND does not improve 24 hours after starting loperamide OR lasts more than 36 hours.
- **Seizures** or **loss of consciousness**.
- Sudden onset of **severe muscle weakness** or **paralysis**.
- Signs of **anemia** such as unusual tiredness or weakness.
- New or worsening **cough**.
- Signs of **kidney problems** such as lower back or side pain, swelling of feet or lower legs.
- Signs of **liver problems** such as yellow eyes or skin, white or clay-coloured stools.
- Signs of **bladder problems** such as decrease or increase in urination or painful or difficult urination.
- Signs of **gout** such as joint pain.
- **Changes in eyesight**.
- Ringing in your ears or **hearing problems**.
- **Trouble** in walking.

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

- Uncontrolled nausea and/or vomiting.
- Headache not controlled with acetaminophen.
- Pain in your stomach or abdomen.
- 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.
- Trouble sleeping.
- Memory loss (amnesia)
- Skin rash.
- For people with diabetes: uncontrolled blood sugars.

If you experience symptoms or changes in your body that have not been described above but worry you, tell your healthcare team about them at the time of your next visit. 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.