

For the Patient: GICPART

Other Names: Curative-intent combined modality therapy for cancer of the anal canal, using Cisplatin, Capecitabine and Radiation Therapy.

GI = GastroIntestinal

CP = Capecitabine Cisplatin

A = Anal

RT = Radiation Therapy

ABOUT THIS MEDICATION

What is this treatment used for?

- Cisplatin and capecitabine are drugs used to treat cancer of the anal canal. Cisplatin is given directly into the vein, or intravenously (IV). Capecitabine is a tablet you take by mouth.
- Radiation therapy is a very effective therapy used to kill cancer cells by directing high-energy X-rays beams to a specific area of the body.

How do cisplatin, capecitabine and radiation therapy work?

- Cisplatin and capecitabine work by interfering with dividing cells and preventing an increase in the number of cancer cells.
- Radiation also works by interfering with dividing cells by either killing them or stopping them from growing and reproducing.
- Cisplatin and capecitabine also act as a “radio-sensitizer”. That is, the cisplatin and capecitabine make the cancer cells more sensitive to the killing effect of the radiation. This is why the two types of treatment are used together at the same time.

INTENDED BENEFITS

- You are being asked to take cisplatin, capecitabine and radiation therapy with the intent of curing your anal canal cancer.

TREATMENT SUMMARY

How are these drugs given?

Cisplatin

- You will receive cisplatin at the clinic by the chemotherapy nurse on day 1 of your first week, and day 1 of your fifth week of treatment, only. Cisplatin is given IV and each treatment will take **about 2 and a half hours**.

Capecitabine

- Capecitabine is a tablet that is taken by mouth. You will start your capecitabine the same day as your first cisplatin treatment
- Capecitabine is usually taken **twice a day**, about 10 - 12 hours apart, with equal numbers of tablets taken at each dose. You may be given tablets of more than one strength to make up the right dose. Capecitabine is best taken within 30 minutes following the end of a meal (usually breakfast and dinner) with a glass of water.

- **During combined treatment** with radiation, capecitabine is given from Monday to Friday, for the six weeks of combined treatment with radiation, as long as you are not having too many side effects as determined by your doctor. No capecitabine is taken on Saturday or Sunday. You will be given enough medication to take home with you. If your doctor decides to delay or stop your capecitabine during radiation therapy due to side effects of the drug, your radiation treatments will continue.
- Your capecitabine prescription will be dispensed **one week at a time** by the pharmacy at the [BC Cancer](#). You will need to **visit the pharmacy** before your radiation therapy starts to pick up your first week supply of capecitabine. Blood work must be checked as you go through treatment, and will be reviewed each week before the next supply of capecitabine is given to you

How is radiation therapy given?

- Radiation therapy is offered at each of the five regional [BC Cancer](#) Centres.
- Prior to starting treatment, you will attend the cancer centre to have your treatment planned. A CT scanner will take images which the radiation oncologist and radiation therapist will use to custom plan your treatment.
- Your treatment will start a few days after your planning appointment.
- A machine called a linear accelerator is used to generate and give the high energy x-rays.
- Radiation treatments are given every day of the week except weekends and holidays.

The calendar below outlines your overall treatment plan.

DATE	WEEK	TREATMENT PLAN
		Radiation Therapy: 28 fractions over 5 ½ weeks (Monday to Friday)
	1	▶ Cisplatin IV on day 1 only ▶ Capecitabine orally in a.m. & p.m. x 5 days (Monday to Friday)
	2	▶ Capecitabine orally in a.m. & p.m. x 5 days (Monday to Friday)
	3	▶ Capecitabine orally in a.m. & p.m. x 5 days (Monday to Friday)
	4	▶ Capecitabine orally in a.m. & p.m. x 5 days (Monday to Friday)
	5	▶ Cisplatin IV on day 1 only ▶ Capecitabine orally in a.m. & p.m. x 5 days (Monday to Friday)
	6	▶ Capecitabine orally in a.m. & p.m. x 5 days (Monday to Friday)

What will happen when I get my drugs?

- A **blood test** is done on or before the first day of treatment. Weekly blood tests will be done during capecitabine treatment. The dose and timing of your chemotherapy may be changed based on your blood counts and/or other side effects.
- You will be given **hydration fluid** directly into the vein (IV) before receiving your cisplatin. This helps prevent kidney problems.
- Your doctor may ask you to **drink water** on the morning of your cisplatin (2 – 3 cups). Following your treatment your doctor may ask you to drink plenty of liquids.
- You will have been given a prescription for **anti-nausea medication** (to be filled at your regular community pharmacy) that you bring in each time for your cisplatin. Your chemotherapy nurse will tell you when to take the anti-nausea medication. It is easier to prevent nausea than to treat it once it has occurred, so follow directions closely.

What will happen when I get my radiation therapy?

- Radiation treatments are delivered every day of the week except weekends and holidays.
- The length of your treatment appointment will be approximately 15 minutes, but you will be receiving radiation for only a few minutes.
- While the radiation is being given, the radiation therapists will not be in the room with you. They will be watching you on a video camera and you can talk with them over the microphone.
- You will not feel anything during the radiation treatments.

SIDE EFFECTS AND WHAT TO DO ABOUT THEM

Chemotherapy

Unexpected and unlikely side effects can occur with any drug treatment. The ones listed below are particularly important for you to be aware of as they are directly related to the common actions of the drugs in your treatment plan.

Your doctor will review the risks of treatment and possible side effects with you before starting treatment. The chemotherapy nurse will review possible side effects of cisplatin and how to manage those side effects with you on the day you receive your first treatment. The pharmacist will review how to take the capecitabine and possible side effects with you on the day you first pick up your medication.

SERIOUS SIDE EFFECTS DURING TREATMENT	MANAGEMENT
Allergic reactions may very rarely occur. Signs of an allergic reaction are dizziness, confusion, and wheezing. This may occur immediately or several hours after receiving cisplatin. It can occur after the first dose, or after many doses.	Tell your nurse if this happens while you are receiving the drugs or contact your doctor immediately if this happens after you leave the clinic.
Cisplatin burns if the drug 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.

SERIOUS SIDE EFFECTS DURING TREATMENT	MANAGEMENT
<p>Nausea and vomiting may occur after your treatment of cisplatin and may last for up to 24 hours. Nausea may last longer for some patients (i.e. delayed nausea and vomiting). Many people have little or no nausea while taking capecitabine.</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 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 <i>Practical Tips to Help Manage Nausea*</i>. <p>Your doctor may manage delayed nausea and vomiting differently. Be sure to let your doctor know if you experience this.</p>
<p>Hand-foot skin reaction may occur very commonly during capecitabine treatment. The palms of your hands and soles of your feet may tingle, become red, numb, painful, or swollen. Skin may also become dry or itchy. You may not be able to do your normal daily activities if blisters, severe pain or ulcers occur.</p>	<ul style="list-style-type: none"> • Avoid tight-fitting shoes or rubbing pressure to hands and feet, such as that caused by heavy activity. • Clean hands and feet with lukewarm water and gently pat to dry; avoid hot water. • Apply lanolin-containing creams (eg. BAG BALM®, UDDERLY SMOOTH®) to hands and feet liberally and often. • Tell your cancer doctor at the next visit if you have any signs of hand-foot skin reaction. • Stop taking capecitabine and call your cancer doctor if the skin reaction is painful, as your dose may need to be changed. Taking a lower dose does not affect the usefulness of capecitabine.

<p style="text-align: center;">SERIOUS SIDE EFFECTS DURING TREATMENT</p>	<p style="text-align: center;">MANAGEMENT</p>
<p>Diarrhea may occur during treatment.</p>	<p>To help diarrhea:</p> <ul style="list-style-type: none"> • Drink plenty of fluids • Eat and drink often in small amounts • Eat low fibre foods & avoid high fibre foods as outlined in <i>Food Ideas to Help Manage Diarrhea*</i>. <p>If you have an increase of less than 4 stools per day more than normal, or a mild increase in ostomy output, start the following:</p> <ul style="list-style-type: none"> • Loperamide (IMODIUM®) 2 mg, take 2 tablets (4 mg) to start, followed by 1 tablet (2 mg) every 4 hours, or after each unformed stool to a maximum of 8 tablets (16 mg) daily, unless otherwise directed by a physician <p>Stop taking capecitabine and call your cancer doctor if you have four stools a day more than usual or diarrhea during the night, or a moderate increase in ostomy output, as your capecitabine dose may need to be changed.</p> <p>Note: If lactose in milk usually gives you diarrhea, the lactose in the tablet may be causing your diarrhea. Take LACTAID® tablets just before your capecitabine dose.</p>
<p>Your white blood cells will decrease 1-2 weeks after your treatment. They usually return to normal 3 weeks 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.</p>	<p>To help prevent infection:</p> <ul style="list-style-type: none"> • Wash your hands often and always after using the bathroom. • Take care of your skin and mouth. • Call your doctor immediately at the first sign of an infection such as fever (over 100°F or 38°C by an oral thermometer), chills, cough, or burning when you pass urine.
<p>Sore mouth may occur commonly during 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.</p>	<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 ½ teaspoon baking soda or salt in 1 cup warm water and rinse several times a day. • Try soft, bland foods like puddings, milkshakes and cream soups. • Avoid spicy, crunchy or acidic food, and very hot or cold foods. • Try ideas in Food Ideas to Try with a Sore Mouth*.

OTHER SIDE EFFECTS DURING TREATMENT	MANAGEMENT
<p>Pain or tenderness may occur where the needle was placed.</p>	<p>Apply a cool compress or soak in cool water for 15 – 20 minutes several times a day.</p>
<p>Your platelets may decrease during or after your treatment. They will return to normal after your last treatment. This is common. Platelets help to make your blood clot when you hurt yourself. You may bruise or bleed more easily than usual.</p>	<p>To help prevent bleeding problems:</p> <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. <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"> • 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.
<p>Tiredness, fatigue and lack of energy may occur. As the number of treatment cycles increase, fatigue may get worse.</p>	<ul style="list-style-type: none"> • Do not drive a car or operate machinery if you are feeling tired. • Try the ideas in the handout titled <i>Fatigue/Tiredness</i>*
<p>Your skin may sunburn easily from the capecitabine.</p>	<p>To help prevent sunburn:</p> <ul style="list-style-type: none"> • Avoid direct sunlight. • Wear a hat, long sleeves and long pants or skirt outside on sunny days. • Apply a sun block lotion with an SPF (sun protection factor) of at least 30. • Refer to Your Medication Sun Sensitivity and Sunscreens* or the BC Health Guide for more information. • After sun exposure, if you have a severe sunburn or skin reaction such as itching, rash, or swelling, contact your doctor.
<p>Hair loss is rare with cisplatin and capecitabine. Your hair will grow back once you stop treatment. Colour and texture may change.</p>	<ul style="list-style-type: none"> • Use a gentle shampoo and soft brush. • Care should be taken with use of hair spray, bleaches, dyes and perms. • If hair loss is a problem, refer to Resources for Hair Loss and Appearance Changes*

*Please ask your chemotherapy nurse, pharmacist or dietitian for a copy.

Special note:

Heart Problems: Serious heart problems can occur when starting capecitabine. These can rarely be fatal. Problems such as chest pain, heart attack, abnormal heart rhythm, or heart failure can occur. Having a history of heart problems with fluorouracil, a related chemotherapy drug, is a risk factor, as is having a history of prior angina (heart pain) or heart attack. Seek medical attention promptly if you experience feelings of heavy pressure or pain in the chest, trouble breathing, significant worsening leg swelling, or marked lightheadedness. These symptoms can occur within days after starting capecitabine. If your symptoms are severe, you may need to call for emergency help.

Radiation Therapy

- Prior to starting treatment, your radiation oncologist and radiation therapist will provide you with information on the side effects you may experience. You will also be provided with information on how to manage these side effects.
- The most common side effects are fatigue, bowel urgency, loose bowel movements, proctitis, perineal skin toxicity and possible bladder irritation. The radiation therapists will assess you daily.
- Once a week you will be scheduled to meet with your radiation oncologist which will mean you will be at the cancer centre a little longer.
- Nurses, dietitians and other health care professionals are available to help support you during treatment.

INSTRUCTIONS FOR THE PATIENT

- Tell your doctor if you have ever had an unusual or **allergic reaction** to fluorouracil (5FU, Aducril®), or cisplatin before taking cisplatin or capecitabine.
- The **drinking of alcohol** (in small amounts) does not appear to affect the safety or usefulness of cisplatin or capecitabine.
- Cisplatin may cause **sterility** in men and **menopause** in women. If you plan to have children, discuss this with your doctor before being treated.
- Cisplatin and capecitabine may damage sperm and 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 or your partner becomes pregnant. Do not breast feed during treatment.
- **Tell** doctors, dentists and other health professionals that you are being treated with cisplatin, and capecitabine before you receive any treatment from them.

Capecitabine

- Capecitabine is **taken by mouth** twice a day, about 10-12 hours apart, with equal numbers of tablets taken at each dose. You may be given tablets of more than one strength to make the right dose. Capecitabine should be taken within 30 minutes following the end of a meal (breakfast and dinner) with a glass of water.
- The tablet contains **lactose**.
- If you **vomit after taking capecitabine**, do not take a second dose. Call your doctor during office hours for advice.
- If you **miss a dose of capecitabine**, take it as soon as you can if it is within 6 hours of the missed dose. If it is over 6 hours since the missed dose, skip the missed dose and go back to the usual dosing time. Let your doctor know during office hours if you have missed a dose.

- Sometimes capecitabine treatment has to be **stopped for a short time** because of side effects. When you **restart** capecitabine treatment, do not make up for the missed dose; instead, take as directed by your cancer doctor and finish the treatment on the same day as originally planned. You may be told to take a different dose and you may have extra tablets left over. Return the extra tablets to the clinic at your next visit. Taking a lower dose does not affect the usefulness of capecitabine.
- **Store** capecitabine tablets out of the reach of children; at room temperature; away from heat, light and moisture.

Other important things to know:

- 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.
- 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.

Medication Interactions

Other drugs may **interact** with your chemotherapy treatment.

- Some antibiotics given by vein (e.g. tobramycin, vancomycin) and furosemide (LASIX®), phenytoin (DILANTIN®) and pyridoxine **may interact with cisplatin**.
- Warfarin (COUMADIN®), phenytoin (DILANTIN®) and fosphenytoin (CEREBYX®) **may interact with capecitabine**.

Tell your doctor if you are taking these 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 taking any new drugs.

THE FOLLOWING INFORMATION IS VERY IMPORTANT

STOP TAKING CAPECITABINE AND 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.
- 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 ankles, or fainting.
- Signs of an **allergic reaction** (rare) soon after a treatment including dizziness, fast heart beat, 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 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** with or without **confusion, headache, or changes in eyesight**.
- **Uncontrolled nausea, vomiting or diarrhea**.

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

- **Painful hand-foot skin reaction** such as painful redness, peeling, tingling, numbness, swelling or blistering of the palms of your hands and/or bottoms of your feet. If there is a delay in seeing your doctor, stop taking your capecitabine tablets until you are seen or have discussed with your doctor
- **Muscle weakness.**
- **Diarrhea** with four stools a day more than usual, or diarrhea during the night.
- **Nausea** that causes you to eat a lot less than usual or **vomiting** more than 2 times in 24 hours.
- **Painful redness, swelling or sores on your lips, tongue, mouth or throat.**
- 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.
- Signs of **anemia** such as unusual tiredness or weakness.
- **Severe abdominal or stomach cramping or pain.**

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

- Painless hand-foot skin reaction such as redness, peeling, tingling, numbness, swelling or blistering of the palms of your hands and/or bottoms of your feet,
- Painless redness, swelling or sores on your lips, tongue, mouth or throat.
- Uncontrolled loss of appetite, or constipation.
- Skin rash or itching.
- Changes in fingernails or toenails.
- Heartburn; mild to moderate abdominal or stomach pain.
- Severe skin reaction where you have had radiation.
- Easy bruising or minor bleeding.
- Ringing in your ears or hearing problems.
- Redness, swelling, pain or sores where the needle was placed.
- Watery, irritated eyes.
- Numbness or tingling in feet or hands or painful leg cramps.

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: _____