



For the Patient: GIENDO2

Palliative treatment for pancreatic endocrine tumours using Streptozocin and Doxorubicin

GI = GastroIntestinal

EN = Endocrine

DO = Doxorubicin

ABOUT THIS MEDICATION

What are these drugs used for?

- Streptozocin and doxorubicin are drugs used to treat pancreatic endocrine tumours, which is a type of cancer of the pancreas.

How do these drugs work?

- Streptozocin and doxorubicin work by interfering with dividing cells and preventing an increase in the number of cancer cells.

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 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?

- Streptozocin and doxorubicin are given directly into the vein (IV).
- You will receive streptozocin and doxorubicin at the clinic by a chemotherapy nurse. Doxorubicin will be given to you on two separate days, on day 1 and 22. Streptozocin will be given to you for five days in a row, on days 1 to 5. Each treatment will take **about 1 hour**. Your first treatment will probably take longer as the chemotherapy nurse will review information on the chemotherapy drugs with you.
- This treatment is repeated every 42 days. This 6 week or 42-day period of time is called a "cycle". The cycle is usually repeated as long as you are benefitting from treatment and not experiencing too many side effects, as determined by your oncologist. Dose and timing of your treatment may be changed depending on how the chemotherapy affects you.

The calendar on the following page shows how the medications are given each 6 week cycle.

C Y C L E 1	DATE	TREATMENT PLAN
		▶ Week 1 → Doxorubicin IV on Day 1 → Streptozocin IV on Days 1 - 5
		▶ Week 2 → no treatment
		▶ Week 3 → no treatment
		▶ Week 4 → Doxorubicin IV on Day 22
		▶ Week 5 → no treatment
		▶ Week 6 → no treatment

C Y C L E 2	DATE	TREATMENT PLAN
		▶ Week 1 → Doxorubicin IV on Day 1 → Streptozocin IV on Days 1 - 5
		▶ Week 2 → no treatment
		▶ Week 3 → no treatment
		▶ Week 4 → Doxorubicin IV on Day 22
		▶ Week 5 → no treatment
		▶ Week 6 → no treatment

Treatment may continue for as long as you are benefiting from treatment and not having too many side effects, as determined by your oncologist.

What will happen when I get my drugs?

- A **blood test** is done each cycle, on or before the first day of each cycle. The dose and timing of your chemotherapy may be changed based on your blood counts and/or other side effects

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 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 doxorubicin and streptozocin and how to manage those side effects with you on the day you receive your first treatment.

SERIOUS SIDE EFFECTS DURING TREATMENT	MANAGEMENT
Allergic reactions may very rarely occur. Signs of an allergic reaction are dizziness, feeling faint, confusion, shortness of breath, and wheezing. This may occur immediately or several hours after receiving the drugs. 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.
Doxorubicin and streptozocin can burn if either 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.
Nausea and vomiting may occur within 1 to 4 hours after your treatment and may last for 24 hours.	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. <ul style="list-style-type: none"> • Drink plenty of fluids • Eat and drink often in small amounts • Try the ideas in <i>Food Choices to Help Control Nausea</i>.*
Streptozocin may rarely decrease blood sugar .	If you experience muscle weakness, headache, confusion, trembling, sweating, irritability, fast heartbeat, restlessness, or slurred speech: <ul style="list-style-type: none"> • Drink something high in sugar such as pop or fruit juice or suck on a hard candy. • Check your blood sugar regularly if you are diabetic. • Call your doctor or get emergency help if symptoms continue.

SERIOUS SIDE EFFECTS DURING TREATMENT	MANAGEMENT
<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. • Avoid crowds and people who are sick. • 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>Diarrhea may occur.</p>	<p>To help diarrhea:</p> <ul style="list-style-type: none"> • Drink plenty of fluids. • Eat and drink often in small amounts. • Avoid high fibre foods as outline in <i>Food Ideas to Help with Diarrhea During Chemotherapy*</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.</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 <i>Easy to Chew, Easy to Swallow Food Ideas*</i>.

OTHER SIDE EFFECTS DURING TREATMENT	MANAGEMENT
Streptozocin may rarely increase blood sugar .	Check your blood sugar regularly if you are diabetic.
Your urine may be pink or reddish for 1-2 days after your treatment.	This is expected as doxorubicin is red and is passed in your urine.
Pain or tenderness may occur where the needle was placed.	<ul style="list-style-type: none"> • Apply cool compresses or soak in cool water for 15-20 mins. several times a day.
Your platelets may decrease during or after your treatment. They will 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.	<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.
Hair loss is common with doxorubicin 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 even between treatments. Colour and texture may change.	<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. • Protect your scalp with a hat, scarf or wig in cold weather. Some extended health plans will pay part of the cost of a wig. • Cover your head or apply sunblock on sunny days. • Apply mineral oil to scalp to reduce itching. • If you lose your eyelashes and eyebrows, protect your eyes from dust and grit with a broad-rimmed hat and glasses.
Your skin may darken in some areas such as your nails, soles or palms.	This will slowly return to normal once you stop treatment with doxorubicin.
Loss of appetite and weight loss are common and may persist long after discontinuation of doxorubicin.	Try ideas in <i>High Energy High Protein Ideas*</i> and in Healthy Eating Using High Energy, High Protein Food .

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

INSTRUCTIONS FOR THE PATIENT

- Tell your doctor if you have ever had an unusual or **allergic reaction** to doxorubicin, daunorubicin, epirubicin, idamycin, mitomycin or mitoxantrone before treatment begins.
- Your doctor may tell you to **drink** extra fluids so that you will pass more urine. This may help prevent kidney problems.
- The **drinking of alcohol** (in small amounts) does not appear to affect the safety or usefulness of doxorubicin or streptozocin.
- Doxorubicin may cause **sterility** in men and **menopause** in women. If you plan to have children, discuss this with your doctor before being treated with doxorubicin.
- Doxorubicin and streptozocin may damage sperm and may harm the baby if used during pregnancy. It is best to use birth control while being treated with streptozocin. Tell your doctor right away if you or your partner becomes pregnant. Do not breast feed during treatment.
- Tell doctors or dentists that you are being treated with doxorubicin and streptozocin before you receive any treatment from them.

Medication Interactions

- Other drugs such as digoxin (LANOXIN®) and cyclosporine (NEORAL®, SANDIMMUNE®) may **interact with doxorubicin**, and phenytoin (DILANTIN®) may **interact with streptozocin**. 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

SEE YOUR DOCTOR OR GET EMERGENCY HELP IMMEDIATELY IF YOU HAVE:

- Repeated **vomiting** and cannot keep fluids or medication down.
- Signs of **infection** such as fever (over 100° F or 38°C by an oral thermometer).
- Signs of **heart problems** such as fast or uneven heartbeat, chest pain, chest pressure, shortness of breath or difficulty breathing, swelling of ankles or fainting.
- Signs of **bleeding problems** such as black, tarry stools; blood in the urine; pinpoint red spots on skin; extensive bruising.
- Signs of **low blood sugar** that continue after drinking something high in sugar or sucking on a hard candy. Signs of low blood sugar include: muscle weakness, headache, confusion, trembling, sweating, irritability, fast heartbeat, restlessness, or slurred speech.
- **Uncontrolled nausea, vomiting, or diarrhea.**

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

- Severe **skin reaction** where you have had radiation.
- Signs of **anemia** such as unusual tiredness or weakness.
- Signs of **gout** such as joint pain.
- 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, or absence of urine formation.
- **Changes in eyesight.**
- **Skin rash or itching.**

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

- Excessive thirst or urine output.
- Easy bruising or minor bleeding.
- Redness, swelling, pain or sores where the needle was placed.
- For diabetics: uncontrolled blood sugars.

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: _____