



Provincial Health Services Authority

For the Patient: BRLACPNACG

Alternative NEOAdjuvant Therapy for Triple Negative Breast Cancer using Dose Dense Therapy: CARBOplatin and PACLitaxel NAB Followed by DOXOrubicin and Cyclophosphamide

BR = BReast

LA = Locally Advanced

C = Carboplatin

PN = Paclitaxel NAB

A = Doxorubicin (ADRIAMYCIN®)

C = Cyclophosphamide

G = G-CSF (Granulocyte Colony Stimulating Factor)

ABOUT THESE MEDICATIONS

What are these drugs used for?

- Paclitaxel NAB (pak' li tax' el nab) is a drug known as a nanoparticle, albumin-bound paclitaxel and is used to treat some types of cancer. Paclitaxel NAB is often referred to as nab-paclitaxel. It is a liquid that is injected into a vein, intravenously (IV).
- Paclitaxel NAB is used for patients with previous unmanageable hypersensitivity reactions to paclitaxel or docetaxel.
- Carboplatin (KAR-boe-plat-in) is a drug that is used to treat many kinds of cancers. It is a clear liquid that is injected into a vein, intravenously (IV).
- Doxorubicin (dox-oh-ROO-biss-in) is a drug that is used to treat many types of cancers. It is a red liquid that is injected into a vein, intravenously (IV).
- Cyclophosphamide (sigh-kloe-FOSS-fa-mide) is a drug that is used to treat many types of cancers. It is a clear liquid that is injected into a vein, intravenously (IV).
- Granulocyte Colony Stimulating Factor, G-CSF, also known as filgrastim (fill-GRASS-tim) is a drug that helps your bone marrow make new white blood cells. White blood cells protect your body by fighting bacteria (germs) that cause infection. Filgrastim is a clear liquid that is injected under your skin.

How do these drugs work?

- Paclitaxel NAB, carboplatin, doxorubicin, and cyclophosphamide are anticancer drugs that work by interfering with the genetic material of replicating cells and preventing an increase in the number of cancer cells.
- G-CSF helps the bone marrow make more white blood cells, which help your body fight infections.

TREATMENT SUMMARY

How are these drugs given?

- Your treatment plan consists of 'cycles'. Each cycle lasts 2 or 3 weeks (14 or 21 days).
- The number of total planned cycles will be determined by your oncologist.
- For each cycle, you will have two medications given to you intravenously (through the vein) on day 1.

There are two parts to the treatment plan:

Part One:

- Paclitaxel NAB is given over approximately 30 minutes
- Carboplatin is given over approximately 30 minutes

Part Two:

- Doxorubicin is given over approximately 15 minutes
- Cyclophosphamide is given over 20 minutes to 1 hour

G-CSF (filgrastim) will be injected under the skin once a day on certain days as instructed by your healthcare team. Teaching will be provided for filgrastim injection at home.

The calendar outlines your overall treatment plan:

Part One (cycles 1 to 4):

1 C Y C L E	DATE	TREATMENT PLAN
		▶ Week 1 → Day 1: Paclitaxel NAB, and Carboplatin
		Week 2 → No chemotherapy
		Week 3 → No chemotherapy

This 21-day cycle will repeat until part one of treatment is completed, as determined by your oncologist.

Part Two (cycles 5 to 8):

1 C Y C L E	DATE	TREATMENT PLAN
		▶ Week 1 → Day 1: Doxorubicin and Cyclophosphamide
		Week 2 → No chemotherapy

This 14-day cycle will repeat four times, until treatment is completed, as determined by your oncologist.

What will happen when I get my drugs?

- A blood test will be taken before the start of treatment and before each treatment. The dose and timing of your treatment may be changed based on the test results 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 chemotherapy 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 drugs to take before treatment (to be filled at your regular pharmacy). Please bring your anti-nausea medication with you for each treatment. Your nurse will tell you when to take the anti-nausea medication.
- You will also be given a prescription for G-CSF (filgrastim) to be filled at your regular pharmacy. Your nurse will tell you when to use the filgrastim injection.

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

SIDE EFFECTS	MANAGEMENT
Allergic reactions may rarely occur to paclitaxel NAB. Signs of an allergic reaction may include flushing, dizziness, breathing problems, fast or uneven heart beat, or chest pain. This can occur immediately or several hours after receiving paclitaxel NAB.	Tell your nurse if this happens while you are receiving paclitaxel NAB or contact your oncologist immediately if this happens after you leave the clinic.
Allergic reactions may rarely occur to carboplatin. Signs of an allergic reaction may include rash, itching, fever, dizziness, or breathing problems. This can occur immediately or several hours after receiving carboplatin.	Tell your nurse if this happens while you are receiving carboplatin or contact your oncologist immediately if this happens after you leave the clinic.
Paclitaxel NAB and doxorubicin burn if they leak 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 cool compresses or soak in cool water for 15-20 minutes several times a day.
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.
Nausea and vomiting may occur after your treatment. If you are vomiting and it is not controlled, you can quickly become dehydrated. Most people have little or no nausea.	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. <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 Manage Nausea</i>.* • Tell your healthcare team if nausea or vomiting continues or is not controlled with your anti-nausea drug(s).

SIDE EFFECTS	MANAGEMENT
<p>Normal 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. • Avoid crowds and people who are sick. • Call your healthcare team immediately 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>Normal platelets help your blood to clot normally after an injury (e.g., cut). When the platelet count is low, you may be more likely to bruise or bleed.</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). <p>For minor pain, try acetaminophen (e.g., TYLENOL®) first, but occasional use of ibuprofen may be acceptable.</p>
<p>Diarrhea may sometimes 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 <i>Food Choices to Help Manage Diarrhea</i>.* • Tell your healthcare team if you have diarrhea for more than 24 hours

SIDE EFFECTS	MANAGEMENT
<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 ¼ teaspoon baking soda AND ¼ teaspoon salt in 1 cup warm water and rinse several times a day. • Try the ideas in <i>Food Ideas to Try with a Sore Mouth.</i>*
<p>Nasal congestion may occur during administration of cyclophosphamide. You may experience runny eyes and nose, sinus congestion and sneezing during or immediately after the infusion.</p>	<ul style="list-style-type: none"> • For persistent nasal congestion a decongestant such as pseudoephedrine (e.g., SUDAFED®) or a decongestant/antihistamine such as pseudoephedrine/triprolidine (e.g., ACTIFED®) can be used to relieve symptoms.
<p>Constipation may sometimes occur.</p>	<ul style="list-style-type: none"> • Exercise if you can. • Drink plenty of fluids. • Try ideas in <i>Food Choices to Manage Constipation.</i>*
<p>Muscle or joint pain may sometimes 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 or ibuprofen (e.g., ADVIL®) for mild to moderate pain. Tell your healthcare team if the pain interferes with your activity.</p>
<p>Swelling of hands, feet, or lower legs may rarely occur if your body retains extra fluid.</p>	<p>If swelling is a problem:</p> <ul style="list-style-type: none"> • Elevate your feet when sitting. • Avoid tight clothing.
<p>Loss of appetite sometimes occurs.</p>	<p>Try the ideas in <i>Food Ideas to Help with Decreased Appetite.</i>*</p>
<p>Tiredness and lack of energy may sometimes occur.</p>	<ul style="list-style-type: none"> • Do not drive a car or operate machinery if you are feeling tired. • Try the ideas in <i>Fatigue/Tiredness – Patient Handout.</i>*
<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 usually grows back once your treatments are over and sometimes between treatments. Colour and texture may change.</p>	<p>Refer to <i>Resources for Hair Loss and Appearance Changes – Patient Handout.</i>* 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-rimmed hat and glasses.

SIDE EFFECTS	MANAGEMENT
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.
Numbness or tingling of the fingers or toes commonly occurs. 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.
Headache may sometimes occur.	Take acetaminophen (e.g., TYLENOL®) every 4-6 hours if needed, to a maximum of 4 g (4000 mg) per day.
Bone pain may occur when the white blood cells start to come back in your bone marrow. It often occurs in the lower back or hips. The pain is usually mild and often lasts for only a day.	Take acetaminophen (e.g., TYLENOL®) every 4-6 hours, to a maximum of 4 g (4000 mg) per day.

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

INSTRUCTIONS FOR THE PATIENT:

- Tell your doctor if you have ever had an unusual or **allergic reaction** to carboplatin, cisplatin, paclitaxel NAB, human albumin, doxorubicin, daunorubicin, epirubicin, idarubicin, mitomycin, mitoxantrone, or cyclophosphamide before starting this treatment
- The drinking of alcohol (in small amounts) does not appear to affect the safety or usefulness of paclitaxel NAB, carboplatin, doxorubicin, cyclophosphamide, or G-CSF (filgrastim).
- Drink lots of fluids for the first day or two after chemotherapy, especially while on doxorubicin and cyclophosphamide (8 or more cups a day).
- Paclitaxel NAB, carboplatin, doxorubicin, and cyclophosphamide may damage sperm and 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, or other health professionals that you are being treated with paclitaxel NAB, carboplatin, doxorubicin, cyclophosphamide, and filgrastim before you receive any treatment from them.

THE FOLLOWING INFORMATION IS VERY IMPORTANT

SEE YOUR DOCTOR 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 or breathing problems.
- Signs of **heart or lung problems** such as fast or uneven heartbeat, chest pain, chest pressure, shortness of breath or difficulty breathing, or fainting.
- Signs of an **infection** such as fever (over 100°F or 38°C 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, tarry stools; blood in urine; pinpoint red spots on skin; extensive bruising.

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

- Signs of **bladder problems** such as changes in urination, painful burning sensation, presence of blood or abdominal pain.
- Signs of **anemia** such as unusual tiredness or weakness.
- **Numbness or tingling** in face, feet, or hands or weakness in facial muscles.
- **Changes in eyesight**, sensitivity to light, or eye pain.
- Signs of **kidney problems** such as lower back or side pain, swelling of feet or lower legs, numbness or tingling in feet or hands
- Increased **sore throat or mouth** or that makes it difficult to swallow comfortably.
- Uncontrolled **nausea, vomiting, or diarrhea**.
- Ringing in your ears or **hearing problems**.
- **Skin rash or itching**.
- **Stomach pain** not controlled by antacids or acetaminophen.

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 _____