



For the Patient: Neoadjuvant therapy for triple negative breast cancer using carboplatin and weekly paclitaxel followed by doxorubicin and cyclophosphamide

Other names: **BRLACTWAC**

BR Breast

LA Locally Advanced

C Carboplatin

T Paclitaxel (TAXOL®) weekly

A Doxorubicin (ADRIAMYCIN®)

C Cyclophosphamide

Uses:

- BRLACTWAC is a drug treatment given before, or sometimes after, breast cancer surgery (called neoadjuvant or adjuvant chemotherapy), in the hope of destroying breast cancer cells that may have spread to other parts of your body. This treatment may reduce the chance of your breast cancer coming back and may improve your overall survival or chance of a cure. If you are receiving this therapy prior to surgery, your clinician will be assessing whether your cancer is improving with each treatment.

Treatment Plan:

- Your treatment plan consists of 8 chemotherapy cycles. Total time on drug treatment would be up to about 6 months. A cycle length is 3 weeks. The chemotherapy drugs are given intravenously at every visit. For each cycle, you will see your clinician and will need to have a blood test before each treatment. The dose and timing of your chemotherapy may be changed based on your blood counts and/or other side effects.
- Paclitaxel and Carboplatin are given for 4 cycles. Paclitaxel will be given once weekly for 12 weeks (=4 cycles) for the first 4 cycles while carboplatin will be given once every 3 weeks for the first 4 cycles. Each treatment takes about three hours. You will be given some intravenous medications before the Paclitaxel to prevent or lessen the chance of an allergic reaction. You will be given a prescription for anti-nausea drugs to take 30 – 60 minutes before Day 1 of treatment with Carboplatin.
- Following the 4 cycles of Paclitaxel and Carboplatin treatment, Doxorubicin and Cyclophosphamide (AC) are given for 4 cycles. Each treatment takes about one hour and can be given either every two or three weeks. You will be given a prescription for anti-nausea drugs to take 30 – 60 minutes before the treatment.
- A medication called Filgrastim (G-CSF) may be prescribed for some patients during the Doxorubicin and Cyclophosphamide (AC) portion of the protocol (if given every 14 days) for a period of 7-8 days starting on day 3 of treatment. It is a medication that you will inject under your skin, and it will help your bone marrow make new white blood cells (WBC) in time

for your next treatment in 2 weeks. WBC help protect your body by fighting bacteria (germs) that cause infection. You will receive some teaching so that you can perform the GCSF injection yourself.

Instructions:

- Bring your anti-nausea drugs with you to take on day 1 of each cycle before you receive treatment. You will also need to take your anti-nausea drugs at home after therapy. It is easier to prevent nausea than treat it once it has occurred, so follow directions closely.
- Drink lots of fluids for the first day or two after chemotherapy, especially while on doxorubicin and cyclophosphamide (8 or more cups a day).
- Check with your doctor or pharmacist before you start taking any new drugs. Other drugs such as Phenytoin (DILANTIN®), Warfarin (COUMADIN®), Digoxin (LANOXIN®), and Thiazide diuretics (“water pills”) may interact with BRLACTWAC.
- You may drink small amounts of alcohol, as it will not affect the safety or usefulness of your treatment.
- Tell other doctors or dentists that you are being treated with BRLACTWAC before you receive any treatment from them.
- If you are a woman, still having menstrual periods, BRLACTWAC may cause your ovaries to stop working, resulting in menopausal symptoms (such as hot flushes) and infertility. Your periods may stop. **This may be permanent**, especially if you are 40 years of age or older. Even if you have stopped having periods after treatment, if you were fertile prior to chemotherapy, you may be able to conceive a pregnancy. Use birth control (but **not** birth control pills) if you could become pregnant, even if you have stopped menstruating because of chemotherapy. Do not breast feed during treatment. Talk to your doctor if you have questions about fertility and birth control after treatment.

The calendar below shows how the medications are given every cycle:

Cycles 1 - 4

Cycles	DATE	TREATMENT PLAN
1 - 4		Week 1 → Blood test, Premedication IV, Paclitaxel IV, Carboplatin IV
		Week 2 → Blood test, Premedication IV, Paclitaxel IV only
		Week 3 → Blood test, Premedication IV, Paclitaxel IV only

Cycles 5 - 8

Cycles	DATE	TREATMENT PLAN
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5 - 8	Week 1 → Blood test, Doxorubicin IV, Cylophosphamide IV
	Week 2 → no treatment
	Week 3 → no treatment (Some patients may receive chemotherapy every two weeks. In that case, they only get 1 week off treatment)

Serious Risks of Treatment:

Unwanted side effects can occur with any drug treatment. The ones listed below are among the more frequent concerns with your treatment:

During treatment:

- **Infection:** The number of white blood cells that help fight infections may be lowered by the chemotherapy drugs. Your blood cell counts will be checked each week during the initial paclitaxel and carboplatin therapy. There may be a drop in your blood cells within a week of starting chemotherapy. If you have a fever between treatments, you need to seek medical evaluation urgently, in case your white blood cells are low at that time, making you more vulnerable to serious infection. If you have just had a blood count within a day or two, and it was normal, you may be reassured by talking to a clinician, but it is always safest to seek medical advice for fever, when on chemotherapy. If you can't speak directly to a clinician about your fever, you should immediately go to your **nearest Hospital Emergency and tell the doctor you are on chemotherapy**. When you move on to the doxorubicin and cyclophosphamide, given only every 3 weeks, the risk of a major drop in white blood cells is higher, and you won't be having as frequent blood tests. It is then all the more important to be aware of and to report fever promptly. While you are on G-CSF, it will speed up the rate of recovery of your WBC, but may not prevent low WBC levels altogether, nor infection.
- **Increased risk of bleeding:** The number of platelets (blood cells that help your blood to clot normally after injury) may be lowered by the treatment. They are expected to return to normal by day 1 of next cycle. When the platelet count is low you may be more likely to bruise or bleed. Notify your cancer doctor promptly if you develop large or numerous bruises, or unusual bleeding (eg. nosebleed that won't stop, blood in stool, urine, or sputum). Try to avoid using ASA or ibuprofen, if other pain medications could be used. Talk to your doctor if you feel you need to use one of these medications while on chemotherapy. For patients receiving Warfarin, which also increases the risk of bleeding, a modification of the dose may be required based on blood test results.
- **Tissue or vein injury:** Paclitaxel and Doxorubicin can cause tissue injury if it leaks out of the vein while being given. Report any sensation of burning or pain to your nurse immediately. Chemotherapy may cause some inflammation and/or scarring in the veins, which may make it difficult to start an IV. Your nurse will help your doctor assess whether a special intravenous device (PICC line or portacath) needs to be considered for your therapy. Pain or tenderness may occur where the needle was placed in your vein. If so, apply cool compresses or soak in cool water for 15-20 minutes several times a day.

During or after treatment:

- **Heart Failure:** Rarely, doxorubicin can have a serious effect on the heart, causing failure of the heart's pumping action, which results in shortness of breath, fatigue and leg swelling. This can sometimes develop years after treatment. Your treatment may be stopped, and a heart function test done, if there are concerns about your heart function during therapy.
- **Leukemia:** After chemotherapy, there is an increase in the risk of leukemia, a cancer of the white blood cells. The risk is about 1% or less after this type of chemotherapy.
- **Neuropathy:** Paclitaxel or Carboplatin can cause damage to the peripheral nerve endings (the nerves to the hands and feet, and rarely, other areas). This can result in feelings of numbness and tingling, or sometimes painful burning sensations. If you develop numbness, you will need to be careful when handling things that are sharp, hot, or very cold. The majority of the time, these feelings develop after a number of treatments, are not severe, and will resolve fully over a period of months once treatment stops. Infrequently (<5%), these feelings might occur early, might be severe, or might not entirely resolve. Inform your clinician if you are developing numbness or tingling.
- **Kidney dysfunction:** Rarely, carboplatin can cause damage to the kidneys. Your kidney function will be monitored with a blood test before each treatment with chemotherapy.

Common chemotherapy side effects and management:

SIDE EFFECT	MANAGEMENT
<p><i>Nausea and vomiting</i> can occur with Carboplatin and the AC portion of your chemotherapy. You will need to take anti-nausea drugs on Day 1 of carboplatin and the AC portion of your treatment. Anti-nausea drugs are not usually required for paclitaxel.</p>	<p>You will be given a prescription for anti-nausea drugs to take before your IV treatment and afterwards at home.</p> <ul style="list-style-type: none"> • It is easier to prevent nausea than treat it once it has occurred, so follow directions closely. • Refer to the following pamphlets: <i>For the Patient: Managing Nausea; Chemotherapy & You; Food choices to help control nausea*</i>.
<p>Allergic reactions may occur after the administration of Paclitaxel. Signs of an allergic reaction can vary but might include flushing, rash, itching, dizziness, swelling or breathing problems, or sudden chest, back pain, or abdominal pain.</p>	<ul style="list-style-type: none"> • Dexamethasone is used to help prevent allergic reactions. You will be given dexamethasone as a single injection prior to each treatment. • Your nurse will check your heart rate (pulse) and blood pressure if needed. • Tell your nurse or doctor <i>immediately</i> if you feel suddenly unwell or unusual during treatment, such as with any of the listed symptoms.

SIDE EFFECT	MANAGEMENT
<p>Hair loss. Your hair will often begin to fall out 2-4 weeks after treatment begins. Your scalp may feel tender. You may lose hair on your face and body. Your hair will grow back once your chemotherapy treatments are over and sometimes between treatments. The colour and texture of the new hair growth may be different.</p>	<ul style="list-style-type: none"> • Avoid hair spray, bleaches, dyes and perms. • 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. • Ask your nurse about information on wigs and head coverings.
<p>Fatigue is common. As the number of chemotherapy cycles increases, fatigue may get worse or last longer. If your cancer has been causing fatigue, you may feel better initially, if treatment is effective.</p>	<ul style="list-style-type: none"> • Your energy level will improve with time after treatment is completed. • You may obtain a suggestion pamphlet for handling fatigue from nursing staff in your facility.
<p>Mouth sores may occur during the cycle, and may last days or weeks. Mouth sores can occur on the tongue, gums, and the sides of the mouth or in the throat.</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. • Try baking soda mouth rinses (using 1/4 tsp baking soda in 1 cup warm water) and rinse several times a day. Try ideas in <i>Easy to chew, easy to swallow food ideas*</i>. <p>Tell your doctor about a sore mouth, as your chemotherapy doses may need to be decreased if mouth sores are severe. Call your doctor if you are having difficulty eating or drinking due to pain.</p>
<p>Diarrhea may occur between treatments.</p>	<p>To help diarrhea:</p> <ul style="list-style-type: none"> • Drink plenty of liquids. • Eat and drink often in small amounts. <p>Avoid high fiber foods as outlined in <i>Food ideas to help with diarrhea during chemotherapy.*</i></p>
<p>Burning on urination. AC can cause an irritation of the bladder that results in burning on urination and/or frequency of urination. Urine color may be red after AC for a short while.</p>	<ul style="list-style-type: none"> • Drink more fluids to keep the urine dilute and empty your bladder often.

SIDE EFFECT	MANAGEMENT
<p>Pain affecting joints or muscles may occur for a few days after paclitaxel, though with weekly treatments, this is usually mild. After you stop chemotherapy altogether, you may also feel increased joint aching or stiffness for a few months, in response to the withdrawal of treatment.</p>	<ul style="list-style-type: none"> • Take ibuprofen (e.g., ADVIL®) or acetaminophen (e.g. TYLENOL®) for mild to moderate pain. Discuss your symptoms with your cancer team if your pain is severe. • Your family doctor can help you to manage symptoms of joint pain after chemotherapy.

*available through your Nurse or Pharmacist.

Common filgrastim side effects and management:

SIDE EFFECT	MANAGEMENT
<p>Pain or tenderness may occur where the needle was placed.</p>	<ul style="list-style-type: none"> • Apply warm compresses or soak in warm water for 15-20 minutes several times a day.
<p>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. Rarely, the pain may be more severe.</p>	<ul style="list-style-type: none"> • Take acetaminophen (e.g., TYLENOL®) for mild to moderate pain. • If you have more severe pain, contact your doctor about whether to continue the G-CSF, and about what to use for pain relief. It may be appropriate to have your doctor check your WBC level in this case, as sometimes recovery is faster than expected.

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 _____