

AC-PACL(DD) Treatment

This handout gives general information about this cancer treatment.

You will learn:

- · who to contact for help
- · what the treatment is
- how it is given
- what to expect while on treatment



This handout was created by Ontario Health (Cancer Care Ontario) together with patients and their caregivers who have also gone through cancer treatment. It is meant to help support you through your cancer treatment and answer some of your questions.

This information does not replace the advice of your health care team. Always talk to your health care team about your treatment.

Who do I contact if I have questions or need help?		
My cancer health care provider is:		
During the day I should contact:		
Evenings, weekends and holidays:		

What is this treatment?

AC-PACL (DD) is the code name of your breast cancer treatment regimen.

A regimen is a combination of medications to treat cancer.

This regimen name is made up of one or more letters from the names of the 3 medications in your treatment. This regimen name also has letters that describe the dose or other information about how the medication is given.

Here are the names of the medications in this regimen and what the other letters mean:

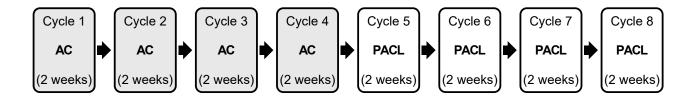
AC = doxorubicin (also called Adriamycin®) and Cyclophosphamide

PACL = PACLitaxel (also called Taxol®)

DD = dose dense, meaning treatment is given every 2 weeks. Each 2-week period is called a **cycle**.

For most people, treatment lasts **16 weeks**. The treatment is divided into **8 cycles**. Each cycle is **2 weeks** long.

Here is a picture of the schedule for AC-PACL (DD) treatment:



During each 2-week cycle, you will have AC or PACL treatment on day 1 at the hospital.

Each cycle looks like this:

Day 1 Treatment Day: Go to the hospital for AC or PACL treatment	No AC or PACL Treatment	3	4	5	6	7
8	9	10	11	12	13	14



Remember To:

- ✓ Tell your health care team about all of the other medications you are taking.
- ✓ Keep taking other medications that have been prescribed for you, unless you
 have been told not to by your health care team.

You will have a blood test to check for hepatitis B before starting treatment. See the <u>Hepatitis B and Cancer Medications</u> pamphlet for more information.

How is this treatment given?

The medications in your treatment are given through an IV (injected into a vein) at the hospital.

Your health care team may suggest that you get a **PICC line** or a **Port-a-Cath**.

- These are special IV's used to give medicines and fluids into larger veins.
- A PICC or Port-a-Cath can be safer for some medications that can cause reactions when given through an IV in your hand.
- If you have a PICC or Port-a-Cath you do not need an IV (needle) put into your arm every time you come for treatment.

✓ Talk to your healthcare team about the benefits and risks of a PICC or a Port-a-Cath to see if one of these options is right for you.

You will have a blood test before each treatment cycle to make sure it is safe for you to get treatment.

What other medications are given with this treatment?

To Prevent Nausea and Vomiting

You will be given medications to help prevent nausea (feeling like throwing up) and vomiting (throwing up) before they start.

• These are called anti-nausea medications and include medications such as ondansetron (Zofran®), granisetron (Kytril®), aprepitant (Emend®), olanzapine (Zyprexa®) or others.

To Prevent Allergic Reaction

Before paclitaxel (PACL), you may be given medications to help prevent allergic reactions before they start.

- There are different types of medications to stop allergic reactions. They are called:
 - antihistamines (such as diphenhydramine or Benadryl®)
 - analgesics/antipyretics (such as acetaminophen or Tylenol®)
 - H2 blockers (such as ranitidine or famotidine)
 - corticosteroids (such as prednisone)

To Prevent Infection

You will also be given a medication after each treatment day to increase your white blood cell count (neutrophils). This helps to prevent infection and make sure it is safe for you to get your next treatment.

• The medication may be called filgrastim (such as Neupogen®, Grastofil®, or others) or pegfilgrastim (such as Neulasta®, Lapelga®, or others).

DO this while on treatment

- ✓ DO tell your health care team about any other medical conditions that you have such as heart, liver or kidney problems, or any allergies.
- ✓ DO check with your health care team before getting any vaccinations, surgery, dental work or other medical procedures.
- ✓ DO drink plenty of fluids (unless told differently) and pee often for 2 or 3 days after your AC treatment to prevent bladder irritation. It is normal for your urine (pee) to be red for up to 2 days after your AC treatment. Tell your health care team if your pee stays red for more than 2 days.
- ✓ DO talk to your health care team about your risk of getting other cancers and heart problems after this treatment.
- ✓ DO consider asking someone to drive you to and from the hospital on your treatment days. You may feel drowsy or dizzy after your treatment.
- ✓ DO tell your health care team if you have any new pain, numbness or tingling of your hands or feet. This is especially important if you are having trouble doing tasks (like doing up buttons, writing, walking) or if you have severe pain or numbness.

DO NOT do this while on treatment



- X DO NOT take any other medications, such as vitamins, over-the-counter (nonprescription) drugs, or natural health products without checking with your health care team.
- X DO NOT start any complementary or alternative therapies, such as acupuncture or homeopathic medications, without checking with your health care team.
- X DO NOT smoke or drink alcohol while on treatment without talking to your health care team first. Smoking and drinking can make side effects worse and make your treatment not work as well.

Will this treatment interact with other medications or natural health products?

Yes, the medications in this regimen can interact with other medications, vitamins, foods and natural health products. Interactions can make the treatment not work as well or cause severe side effects.

Tell your health care team about all of your:

- prescription and over-the-counter (non-prescription) medications
- natural health products such as vitamins, herbal teas, homeopathic medicines, and other supplements

Check with your health care team before starting or stopping any of them.



Talk to your health care team BEFORE taking or using these :

- Anti-inflammatory medications such as ibuprofen (Advil[®] or Motrin[®]), naproxen (Aleve[®]) or Aspirin[®].
- Over-the-counter products such as dimenhydrinate (Gravol[®])
- Natural health products such as St. John's Wort
- Supplements such as vitamin C
- Grapefruit juice
- Alcoholic drinks
- Tobacco
- All other drugs, such as marijuana or cannabis (medical or recreational)

What should I do if I feel unwell, have pain, a headache or a fever?

- ✓ Always check your temperature to see if you have a fever before taking any medications for fever or pain (such as acetaminophen (Tylenol®) or ibuprofen (Advil®)).
 - Fever can be a sign of infection that may need treatment right away.
 - If you take these medications before you check for fever, they may lower your temperature and you may not know you have an infection.

How to check for fever:

Keep a digital (electronic) thermometer at home and take your temperature if you feel hot or unwell (for example, chills, headache, mild pain).

- You have a fever if your temperature taken in your mouth (oral temperature) is:
 - 38.3°C (100.9°F) or higher at any time

OR

• 38.0°C (100.4°F) or higher for at least one hour.



If you do have a fever:

- ✓ Try to contact your health care team. If you are not able to talk to them for advice, you MUST get emergency medical help right away.
- ✓ Ask your health care team for the <u>Fever</u> pamphlet for more information.

If you do not have a fever but have mild symptoms such as headache or mild pain:

✓ Ask your health care team about the right medication for you. Acetaminophen (Tylenol[®]) is a safe choice for most people.



Talk to your health care team before you start taking ibuprofen (Advil[®], Motrin[®]), naproxen (Aleve[®]) or ASA (Aspirin[®]), as they may increase your chance of bleeding or interact with your cancer treatment.



Talk to your health care team if you already take **low dose aspirin** for a medical condition (such as a heart problem). It may still be safe to take.

How will this treatment affect sex, pregnancy and breast feeding?

Talk to your health care team about:

- How this treatment may affect your sexual health
- Changes to your menstrual cycle (periods), if this applies to you
- Symptoms of menopause such as hot flashes, vaginal dryness or changes in your mood, if this
 applies to you
- How this treatment may affect your fertility (ability to have a baby)

This treatment may harm an unborn baby. Tell your health care team if you or your partner are pregnant, become pregnant during treatment, or are breastfeeding.

- If there is **any** chance of pregnancy happening, you and your partner together must use **2 effective forms of birth control** at the same time while you are on treatment. Talk to your health care team about which birth control options are best for you, and how long you should use them after your last treatment dose.
- Do not use hormonal birth control (such as birth control pills), unless your health care team told you that they are safe. Talk to your health care team about the safest birth control for you.
- Do not breastfeed while on this treatment. Talk to your health care team about how long to wait before you start breastfeeding after your last treatment dose, if this applies to you.

What are the side effects of this treatment?

The following table lists side effects that you may have when getting AC or PACL treatment. The table is set up to list the most common side effects first and the least common last. It is unlikely that you will have all of the side effects listed and you may have some that are not listed.

Read over the side effect table so that you know what to look for and when to get help. Refer to this table if you experience any side effects while on AC-PACL (DD).

Very Common Side Effects (50 or more out of 100 people)		
Side effects and what to do	When to contact health care team	
Hair thinning or loss What to look for?	Talk to your health care team if this bothers you	
 Your hair may become thin or fall out during or after treatment. In most cases, your hair will grow back after treatment. The texture or colour may change. In very rare cases, hair loss may be permanent. 		
What to do?		
Use a gentle soft brush.Do not use hair sprays, bleaches, dyes and perms.		
Low neutrophils (white blood cells) in the blood (neutropenia) When neutrophils are low, you are at risk of getting an infection more easily. Ask your health care team for the Neutropenia (Low white blood cell count) pamphlet for more information. What to look for?	If you have a fever, try to contact your health care team. If you are unable to talk to the team for advice,	
 If you feel hot or unwell (for example if you have chills or a new cough), you must check your temperature to see if you have a fever. Do not take medications that treat a fever before you take your temperature (for example, Tylenol® (acetaminophen), or Advil® (ibuprofen)). Do not eat or drink anything hot or cold right before taking your temperature. 	you MUST get emergency medical help right away.	

Side effects and what to do	When to contact health care team
You have a fever if your temperature taken in your mouth (oral temperature) is:	
38.3°C (100.9°F) or higher at any time OR	
• 38.0°C (100.4°F) or higher for at least one hour.	
What to do?	
If your health care team has told you that you have low neutrophils:	
 Wash your hands often to prevent infection. Check with your health care team before getting any vaccines, surgeries, medical procedures or visiting your dentist. Keep a digital thermometer at home so you can easily check for a fever. 	
If you have a fever:	
If you have a fever, try to contact your health care team. If you are unable to talk to the team for advice, you must get emergency medical help right	
away.	
Low platelets in the blood	Talk to your
Low platelets in the blood When your platelets are low, you are at risk for bleeding and bruising. Ask your health care team for the Low Platelet Count pamphlet for more information.	health care team if you have any signs of bleeding. If you have bleeding
Low platelets in the blood When your platelets are low, you are at risk for bleeding and bruising. Ask your health care team for the Low Platelet Count pamphlet for	health care team if you have any signs of bleeding. If you have bleeding that doesn't stop or is severe
Low platelets in the blood When your platelets are low, you are at risk for bleeding and bruising. Ask your health care team for the Low Platelet Count pamphlet for more information.	health care team if you have any signs of bleeding. If you have bleeding that doesn't stop

Very Common Side Effects (50 or more out of 100 people)		
Side effects and what to do	When to contact health care team	
What to do?		
If your health care team has told you that you have low platelets:		
 Tell your pharmacist that your platelet count may be low before taking any prescriptions or over-the-counter medication. Check with your healthcare team before you go to the dentist. Take care of your mouth and use a soft toothbrush. Try to prevent cuts and bruises. Ask your health care team what activities are safe for you. Your treatment may have to be delayed if you have low platelets. Your health care team may recommend a blood transfusion. 		
If you have signs of bleeding:		
 If you have a small bleed, clean the area with soap and water or a saline (saltwater) rinse. Apply pressure for at least 10 minutes. 		
If you have bleeding that does not stop or is severe (very heavy), you must get emergency medical help right away.		
Nausea and vomiting	Talk to your	
(More likely with AC)	health care team if nausea lasts	
What to look for?	more than 48 hours or	
 Nausea is feeling like you need to throw up. You may also feel light- headed. 	vomiting lasts more than 24	
You may feel nausea within hours to days after your treatment.	hours or if severe	
What to do?		
To help prevent nausea:		
 It is easier to prevent nausea than to treat it once it happens. Take your anti-nausea medication(s) as prescribed, even if you do not feel like throwing up. 		

Very Common Side Effects (50 or more out of 100 people)		
Side effects and what to do	When to contact health care team	
 Do not eat spicy, fried foods or foods with a strong smell. Limit caffeine (like coffee, tea) and avoid alcohol. 		
If you have nausea or vomiting:		
 Take your rescue (as-needed) anti-nausea medication(s) as prescribed. Ask your health care team for the Nausea & Vomiting pamphlet for more information. Talk to your health care team if: 		
 nausea lasts more than 48 hours vomiting lasts more than 24 hours or if it is severe 		
Mild joint, muscle pain or cramps (More likely with PACL)	Talk to your health care team if it does not improve	
What to look for?	or if it is severe	
New pain in your muscles or joints, muscle cramps, or feeling achy.		
What to do?		
 Take pain medication (acetaminophen or opioids such as codeine, morphine, hydromorphone, oxycodone) as prescribed. Read the above section: "What should I do if I feel unwell, have pain, a headache or a fever?" before taking acetaminophen (Tylenol®), ibuprofen (Advil®, Motrin®), naproxen (Aleve®) or Aspirin. These medications may hide an infection that needs treatment or they may increase your risk of bleeding. Rest often and try light exercise (such as walking) as it may help. 		
Ask your health care team for the Pain pamphlet for more information.		

Common Side Effects (25 to 49 out of 100 people)	
Side effects and what to do	When to contact health care team
Allergic reaction; Reaction at the injection site	Get emergency
(May be severe)	medical help right away for severe
What to look for?	symptoms
 Fever, itchiness, rash, swollen lips, face or tongue, chest and throat tightness. (More likely with PACL) 	
 It may happen during or shortly after your treatment is given to you and may be severe. 	
 In rare cases, you may have mild redness or discomfort at the site where the doxorubicin was injected. 	
What to do?	
 Tell your nurse right away if you feel any signs of allergic reaction during or just after your treatment. Talk to your health care team for advice if you have a mild skin reaction. 	
If you have mild redness or discomfort at the site where the injection has been given during the AC treatments, you may need to apply ice/cold compresses. Talk to the health care team to find out what treatment is right for you.	
Diarrhea	Talk to your
What to look for?	health care team if no
 Loose, watery, unformed stool (poo) that may happen days to weeks after you get your treatment. 	improvement after 24 hours of taking diarrhea medication or if
What to do?	severe (more than 7 times in
If you have diarrhea:	one day)
 Take anti-diarrhea medication if your health care team prescribed it or told you to take it. 	
 Do not eat foods or drinks with artificial sweetener (like chewing gum or 'diet' drinks), coffee and alcohol. 	
 Eat many small meals and snacks instead of 2 or 3 large meals. Drink at least 6 to 8 cups of liquids each day, unless your health care team has told you to drink more or less. 	
 Talk to your health care team if you can't drink 6 to 8 cups of liquids each 	

Common Side Effects (25 to 49 out of 100 people)		
Side effects and what to do	When to contact health care team	
 day when you have diarrhea. You may need to drink special liquids with salt and sugar, called Oral Rehydration Therapy. Talk to your health care team if your diarrhea does not improve after 24 hours of taking diarrhea medication or if you have diarrhea more than 7 times in one day. 		
Ask your health care team for the <u>Diarrhea</u> pamphlet for more information.		
 Neuropathy (Tingling, numb toes or fingers) (More likely with PACL) What to look for? Numbness or tingling of your fingers and toes may happen after starting your paclitaxel (the last 8 weeks of your treatment). Sometimes it can be painful and feel like burning sensation, which may be severe. 	Talk to your health care team, especially if you have trouble doing tasks like doing up buttons, writing, moving, or if you have severe pain or numbness	
What to do?		
 Talk to your health care team if you have symptoms of neuropathy. Numbness may slowly get better after your treatment ends. 		
In rare cases, it may continue long after treatment ends. If you continue to have bothersome symptoms, talk to your health care team for advice.		

Less Common Side Effects (10 to 24 out of 100 people)		
Side effects and what to do	When to contact health care team	
Fatigue	Talk to your health care team if it	
What to look for?	does not improve or if it is severe	
 Feeling of tiredness or low energy that lasts a long time and does not go away with rest or sleep. 		

Less Common Side Effects (10 to 24 out of 100 people)		
Side effects and what to do	When to contact health care team	
What to do?		
 Be active. Aim to get 30 minutes of moderate exercise (you are able to talk comfortably while exercising) on most days. Check with your health care team before starting any new exercise. Pace yourself, do not rush. Put off less important activities. Rest when you need to. Ask family or friends to help you with things like housework, shopping, and child or pet care. Eat well and drink at least 6 to 8 glasses of water or other liquids every day (unless your health care team has told you to drink more or less). Avoid driving or using machinery if you are feeling tired. 		
Ask your health care team for the <u>Fatigue</u> pamphlet for more information.		
Nail changes	Talk to your health	
 What to look for? You may have changes in nail colour, pain or tenderness, swelling of 	care team if it does not improve or if it is severe	
cuticles, or loosening of nails. • Nails will slowly return to normal after treatment ends.		
What to do?		
 Moisturize your nails and cuticles. Do not use nail polish and fake fingernails until your nails have gone back to normal. Wear gloves when doing house chores or gardening. 		
Pains or cramps in the belly	Talk to your health	
What to look for?	care team if it does not improve or if it is severe	
 Pain or cramps in your belly. Constipation and diarrhea can cause pain in your belly. 		
What to do?		
If the pain is severe, gets worse or doesn't go away, talk to your health care team about other possible causes.		

Less Common Side Effects (10 to 24 out of 100 people)		
Side effects and what to do	When to contact health care team	
Low appetite	Talk to your health care team if it	
What to look for?	does not improve or if it is severe	
Loss of interest in food or not feeling hungry.Weight loss.		
What to do?		
 Try to eat your favourite foods. Eat small meals throughout the day. You may need to take meal supplements to help keep your weight up. Talk to your health care team if you have no appetite. 		
Ask your health care team for the <u>Loss of Appetite</u> pamphlet for more information.		
Mild swelling	Talk to your health care team if it	
What to look for?	does not improve or if it is severe	
 You may have mild swelling or puffiness in your arms and/or legs. Rarely, this may be severe. 	or in it is severe	
What to do?		
To help prevent swelling:		
Eat a low-salt diet.		
If you have swelling:		
Wear loose-fitting clothing.For swollen legs or feet, keep your feet up when sitting.		
Liver problems	Get emergency medical help	
(More likely with PACL)	right away	
Your health care team may check your liver function with a blood test. Liver changes do not usually cause any symptoms.		

Less Common Side Effects (10 to 24 out of 100 people)	
Side effects and what to do	When to contact health care team
What to look for?	
Rarely, you may develop yellowish skin or eyes, unusually dark pee or pain on the right side of your belly. This may be severe.	
What to do?	
If you have any symptoms of liver problems, get emergency medical help right away.	
Mouth sores	Talk to your
What to look for?	health care team as soon as you
 Round, painful, white or gray sores inside your mouth that can occur on the tongue, lips, gums, or inside your cheeks. In more severe cases they may make it hard to swallow, eat or brush your teeth. They may last for 3 days or longer. 	notice mouth or lip sores or if it hurts to eat, drink or swallow
What to do?	
To help prevent mouth sores:	
 Take care of your mouth by gently brushing and flossing regularly. Rinse your mouth often with a homemade mouthwash. To make a homemade mouthwash, mix 1 teaspoonful of baking soda and 1 teaspoonful of salt in 4 cups (1L) of water. Do not use store-bought mouthwashes, especially those with alcohol, because they may irritate your mouth. 	
If you have mouth sores:	
 Avoid hot, spicy, acidic, hard or crunchy foods. Your doctor may prescribe a special mouthwash to relieve mouth sores and prevent infection. Talk to your health care team as soon as you notice mouth or lip sores or if it hurts to eat, drink or swallow. 	
Ask your health care team for the Oral Care (Mouth Care) pamphlet for more information.	

Less Common Side Effects (10 to 24 out of 100 people)				
Side effects and what to do	When to contact health care team			
Taste changes What to look for?	Talk to your health care team if it does not improve			
Food and drinks may taste different than usual.	or if it is severe			
What to do?				
 Eat foods that are easy to chew, such as scrambled eggs, pasta, soups, cooked vegetables. Taste foods at different temperatures, since the flavour may change. Try different forms of foods, like fresh, frozen or canned. Experiment with non-spicy foods, spices and seasonings. 				
Dizziness	Talk to your health care team if it			
What to look for?You may feel light-headed and like you might faint (pass out).	does not improve or if it is severe			
What to do?				
 Lay down right away so you do not fall. Slowly get up and start moving once you feel better. Do not drive a motor vehicle or use machinery if you feel dizzy. 				
Bladder problems	Talk to your			
(With AC)	health care team. Get emergency			
What to look for?	medical help right away for			
 Feeling like you need to pee badly all of a sudden. Pain in your belly or lower belly area or pain when peeing. If severe, you may have blood in your pee. 	severe symptoms.			
What to do?				
 Drink at least 6 to 8 cups (2 Litres) of liquids per day on AC treatment days, unless your health care team has told you to drink more or less. Tell your health care team if your pee is red for more than 2 days after your AC treatment or if you have other symptoms of bladder problems. Get emergency help right away for severe symptoms. 				

Other rare, but serious side effects are possible with this treatment.

If you have **any** of the following, talk to your cancer health care team or get emergency medical help right away:

- irregular heartbeat, shortness of breath or chest pain
- sudden, severe pain in your belly or arm
- sudden confusion, trouble speaking or difficulty moving your arms or legs
- coughing up blood or trouble breathing
- pain and swelling of a vein in your arm or leg
- any changes in your vision
- severe bloating or feeling of fullness
- belly pain that extends to your back
- passing out (fainting) or seizure
- severe rash that causes your skin to blister or peel

For more information on how to manage your symptoms ask your health care provider, or visit: https://www.cancercareontario.ca/symptoms.

Notes		

January 2024 Formatting change only

For more links on how to manage your symptoms go to www.cancercareontario.ca/symptoms.

The information set out in the medication information sheets, regimen information sheets, and symptom management information(for patients) contained in the Drug Formulary (the "Formulary") is intended to be used by health professionals and patients for informational purposes only. The information is not intended to cover all possible uses, directions, precautions, drug interactions or side effects of a certain drug, nor should it be used to indicate that use of a particular drug is safe, appropriate or effective for a given condition.

A patient should always consult a healthcare provider if he/she has any questions regarding the information set out in the Formulary. The information in the Formulary is not intended to act as or replace medical advice and should not be relied upon in any such regard. All uses of the Formulary are subject to clinical judgment and actual prescribing patterns may not follow the information provided in the Formulary.