

PHARMACY

Drug Information

AC-TH Regimen [Doxorubicin, Cyclophosphamide, Paclitaxel, Trastuzumab]



What is the AC-TH Regimen?

- The AC-TH is a chemotherapy regimen consisting of four drugs (Doxorubicin, Cyclophosphamide, Paclitaxel and Trastuzumab). This is given for the treatment of HER-2 positive breast cancer

How is AC-TH Administered?

- AC-TH is given through four separate injections into your veins (intravenously). For the first four to six cycles, you will receive AC every two or three weeks. Followed by 12-weekly injections of Paclitaxel and 3-weekly injections of Trastuzumab (given for up to a year). Alternatively, you may also receive Paclitaxel and Trastuzumab first, followed by four to six cycles of AC.

Can AC-TH be Administered With Other Medications?

- Please inform your doctor or pharmacist if you are taking other medications, including Traditional Chinese Medicines, Jamu medicines or supplements.

What are the Important Side Effects of AC-TH?

Inform the nurses immediately during infusion of AC-TH if you experience the following:

- Infusion related reaction:
 - These are usually mild or moderate, but rarely, they can be more severe. You may be given drugs before the infusion to reduce the chance of a reaction happening.
 - If you do have a reaction, this can usually be treated by slowing or stopping the drip until the reaction is over. Any future infusions will be given at a slower rate.
 - *Inform the nurses immediately during infusion of drugs if you experience the following:*
 - Flu-like symptoms, such as headache, feeling flushed, having a fever, chills or dizziness
 - Red, warm and itchy bumps on the skin
 - Swelling in the lips, tongue or throat
 - Breathlessness, wheezing, a cough or sudden difficulty breathing
 - Chest tightness or chest pain

- Drug leakage
Doxorubicin and Paclitaxel may leak out of the veins and could potentially damage the tissue around the vein. This is called extravasation. Inform the nurse immediately if you have any stinging, pain, redness or swelling around the vein. While uncommon, it is important that it is managed quickly.
- Medications prescribed by your doctor should be beneficial for your condition even though they may result in some inevitable side effects.

Side Effect	Management
Risk of infection can occur as AC-T can reduce the number of white blood cells in your blood	<ul style="list-style-type: none"> • To reduce risk of infection: <ul style="list-style-type: none"> - Wash your hands after toileting. - Avoid crowds and people who are sick. - Avoid raw food. • Please proceed to the A&E department immediately if you experience signs of infection such as fever with a temperature of 38°C and above, chills and shivering. Avoid taking Paracetamol (Panadol®) to relieve fever. Be aware that taking Paracetamol may mask fever and hence delay treatment of infection.
Bruising or bleeding may occur as AC-T can reduce the number of platelets in your blood.	<ul style="list-style-type: none"> • To reduce risk of bleeding problems: <ul style="list-style-type: none"> - Do not pick your nose. - Brush your teeth gently with a soft toothbrush. - Be aware that bleeding may take a longer time to stop. • Please proceed to the A&E department immediately if you experience any severe bleeding (e.g. passing a large amount of fresh blood in urine or stools or passing black sticky stools) or significant bruising.

Side Effect	Management
Nausea or vomiting	<ul style="list-style-type: none"> • Take small, frequent meals. • Avoid smells that precipitate nausea. • Take medicines for nausea or vomiting prescribed by your doctor. • Avoid tight-fitting clothes around the waist.
Diarrhoea	<ul style="list-style-type: none"> • Inform your doctor if this is severe and/or does not improve with medicine use. • Drink at least two litres (8 cups) of fluids every day when you are having diarrhoea. • Avoid milk or dairy products and/or high fibre food whilst you are having diarrhoea.
Mouth ulcers can occur on the tongue, the sides of the mouth or in the throat and this can lead to an infection	<ul style="list-style-type: none"> • Brush your teeth after eating and at bedtime with a soft toothbrush. • Rinse and brush your dentures after eating and soak them in denture solution overnight. • Rinse your mouth regularly with an alcohol-free mouth gargle or salt water. This will help to reduce chances of an infection
Numbness and tingling sensation in the hands or feet	<ul style="list-style-type: none"> • Inform your doctor if you have this symptom or trouble buttoning up shirts or if you are unable to pick up objects.
Muscle aches and joint pain	<ul style="list-style-type: none"> • Mild pain can be relieved by taking Paracetamol (Panadol ®). Inform your doctor if pain is not controlled by Paracetamol (Panadol ®). Avoid Paracetamol (Panadol ®) when you are having fever. • Taking regular warm baths may also help.

Side Effect	Management
Harmless red or pinkish discolouration of the urine	<ul style="list-style-type: none"> This is expected as it is the colour of Doxorubicin and will last for one to two days after chemotherapy.
Bladder inflammation resulting in discomfort when passing urine or blood in the urine	<ul style="list-style-type: none"> Maintain adequate hydration with two to three litres (8 to 12 cups) of fluids per day unless informed by your doctor to restrict fluids.
Hair Loss	<ul style="list-style-type: none"> Wear a wig or hat or use a gentle shampoo.
Rarely, reduction in heart function	<ul style="list-style-type: none"> You may require tests to check how well your heart is working before, during and sometimes, after treatment. If you experience pain or tightness in your chest, feel breathless or notice changes to your heartbeat at any time during or after treatment, please proceed to the A&E department immediately.
Changes in the way the liver works	<ul style="list-style-type: none"> Please proceed to the A&E department immediately if you experience any yellowing of eye white and skin or tea-coloured urine, pale stools or severe abdominal pain.
Risk of blood disorders/leukemia and secondary cancers	<ul style="list-style-type: none"> This occurs very rarely. Please discuss with your physician if you have concerns.

If you develop rashes, facial swelling or shortness of breath after taking the medication, you could be allergic to the medication. Please seek medical attention immediately.

Are There any Special Precautions That I Need to Take?

- It is important to inform your doctor if you intend to conceive or breastfeed while taking this medication.
- You must not become pregnant during treatment with AC-T and must use an effective method of contraception. You should take appropriate contraceptive measures during and up to 12 months after cessation of treatment. If pregnancy occurs during your treatment, you must inform your doctor immediately.
- AC-TH may have an anti-fertility effect, which could be irreversible. You should discuss with your doctor regarding fertility preservation prior to starting treatment.
- You should not breast-feed during treatment

What Else can I do to Help My Condition?

- Exercise
Light exercise is recommended as it helps to improve mobility, balance and even emotional well-being. Avoid strenuous exercise, and rest when you are feeling tired.
- Stay positive
Understand your condition and take an active role in managing it. Do not be afraid to talk about it with your doctor/ pharmacist/ family members. Repressed feelings can be harmful to your immediate well-being and long-term health.
- Adequate hydration
Maintain adequate hydration with two to three litres (8 to 12 cups) of fluids per day unless informed by your doctor to restrict fluids. This will decrease your chances of getting constipation and also prevent dehydration.
- Medical and dental treatment
If you need to go into hospital for any reason other than cancer, always inform the doctors and nurses that you are having chemotherapy. Talk to your cancer doctor if you think you need dental treatment. Always inform your dentist that you are having chemotherapy.

If you have any problem with your treatment, please contact your doctor, pharmacist or nurse clinician.

You can also find useful information with regards to your medication on this website:

<https://www.macmillan.org.uk/information-and-support>



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