

## Pharmacy

### DRUG INFORMATION

# DA Regimen [Daunorubicin, Cytarabine]



### What Is DA Regimen?

- DA is a chemotherapy regimen consisting of two drugs (Daunorubicin and Cytarabine), usually given for the treatment of leukemia.

### How Is DA Administered?

- DA is given through two separate injections into your veins (intravenously). Daunorubicin is given as an infusion from Day 1 to Day 3 and Cytarabine can be given either as a continuous infusion over 24 hours for 7 days or as twice daily injections for 10 days.

### Can DA Be Administered / Taken 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 DA?

- Allergic Reaction  
DA may rarely cause an allergic reaction while it's being given. Signs of a reaction can include a rash, flushing or shortness of breath, swelling of your face or lips, feeling dizzy, having abdominal, back or chest pain or feeling unwell.
- Drug Leakage  
Daunorubicin may leak out of the veins and 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. Extravasation is not common but if it happens it's 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 Daunorubicin and Cytarabine can reduce the number of	<ul style="list-style-type: none"> <li>• To reduce risk of infection:               <ul style="list-style-type: none"> <li>– Wash your hands after toileting.</li> <li>– Avoid crowds and people who are sick.</li> <li>– Avoid raw food.</li> </ul> </li> </ul>

Side Effect	Management
white blood cells in your blood	<ul style="list-style-type: none"> <li>Please proceed to the A &amp; 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.</li> </ul>
Bruising or bleeding can occur as Daunorubicin and Cytarabine can reduce the number of platelets in your blood	<ul style="list-style-type: none"> <li>To reduce risk of bleeding problems: <ul style="list-style-type: none"> <li>Do not pick your nose.</li> <li>Brush your teeth gently with a soft toothbrush.</li> <li>Be aware that bleeding may take a longer time to stop.</li> </ul> </li> <li>Please proceed to the A &amp; 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.</li> </ul>
Nausea or vomiting	<ul style="list-style-type: none"> <li>Take small, frequent meals.</li> <li>Avoid smells that make you feel nauseous.</li> <li>Take medicines for nausea or vomiting prescribed by your doctor.</li> <li>Avoid tight-fitting clothes around the waist.</li> </ul>
Diarrhoea	<ul style="list-style-type: none"> <li>Inform your doctor if this is severe and/or does not improve with medicine use.</li> <li>Drink at least two litres (8 cups) of fluids every day when you are having diarrhoea.</li> <li>Avoid milk, dairy products, high fibre food or spicy food whilst you are having diarrhoea.</li> </ul>

Side Effect	Management
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"> <li>Brush your teeth gently after eating and at bedtime with a soft toothbrush.</li> <li>Rinse and brush your dentures after eating and soak them in denture solution overnight.</li> <li>Rinsing your mouth regularly with an alcohol-free mouth gargle or salt water may help reduce chances of infection.</li> </ul>
Harmless red or pinkish discolouration of the urine	<ul style="list-style-type: none"> <li>This is expected as it is the colour of Daunorubicin and will last for one to two days after chemotherapy.</li> </ul>
Palms of hands and soles of your feet may tingle, become red, numb, painful, or swollen. Skin may also become dry or itchy.	<ul style="list-style-type: none"> <li>Inform your doctor if blisters, severe pain or ulcers affects your normal daily activities.</li> <li>Avoid tight-fitting shoes or rubbing pressure to hands and feet if this occurs.</li> <li>Applying moisturiser to hands and feet liberally often may help.</li> <li>Applying sunscreen with an SPF (sun protection factor) of at least 30 may help.</li> </ul>
Nail may become brittle and break easily, get darker or discoloured; rarely, nails may come off	<ul style="list-style-type: none"> <li>Wearing gloves when washing dishes or using detergents will help protect your nails during treatment.</li> <li>If you get pain, redness or swelling around your nails, inform your doctor.</li> </ul>
Hair Loss	<ul style="list-style-type: none"> <li>Wear a wig or hat or use a gentle shampoo.</li> </ul>
Flu-like symptoms (fever, muscle ache, bone pain, lethargy), rash, sore eyes	<ul style="list-style-type: none"> <li>These symptoms may occur 6 to 12 hours after intravenous Cytarabine, and resolve 24 hours after Cytarabine is discontinued. Please inform your doctor as soon as these symptoms occur.</li> </ul>

Side Effect	Management
Fatigue or Tiredness	Do not drive or operate machinery if you are feeling tired. Inform your doctor if fatigue is persistent or worsens.
Changes the way the heart works	<ul style="list-style-type: none"> <li>You may require tests to check how well your heart is working before, during and sometimes after treatment.</li> <li>Please proceed to the A &amp; E department immediately if you experience shortness of breath, difficulty breathing, tightness in chest, chest pain, fast or irregular heart beat or sudden swelling of legs.</li> </ul>
Changes in the way the liver works	<ul style="list-style-type: none"> <li>Please proceed to the A &amp; E department immediately if you experience any yellowing of eye white and skin or tea-coloured urine, pale stools or severe abdominal pain.</li> </ul>
Risk of blood disorders/leukemia and secondary cancers	<ul style="list-style-type: none"> <li>This occurs very rarely. Please discuss with your physician if you have concerns.</li> </ul>

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 DA and must use an effective method of contraception. You should take appropriate contraceptive measures during and up to 6 months after stopping treatment. If pregnancy occurs during your treatment, you must inform your doctor immediately.

- DA 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 2 to 3 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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