

## Doxorubicin

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### About This Drug

Doxorubicin is used to treat cancer. It is given in the vein (IV).

### Possible Side Effects

- Soreness of the mouth and throat. You may have red areas, white patches, or sores that hurt.
- Nausea and vomiting (throwing up)
- Diarrhea (loose bowel movements)
- Hair loss. Hair loss is often temporary, although with certain medicine, hair loss can sometimes be permanent. Hair loss may happen suddenly or gradually. If you lose hair, you may lose it from your head, face, armpits, pubic area, chest, and/or legs. You may also notice your hair getting thin.

**Note:** All possible side effects are not included. Your side effects may be different depending on your cancer diagnosis, condition, or if you are receiving other drugs in combination. Please discuss any concerns or questions with your medical team.

### Warnings and Precautions

- Skin and tissue irritation including redness, pain, warmth, or swelling at the IV site if the drug leaks out of the vein and into nearby tissue. Very rarely it may cause tissue necrosis (tissue death).
- Changes in your heart function, which can be life-threatening such as abnormal electrocardiogram (EKG/ECG), inflammation (swelling) in the tissue of the heart, and congestive heart failure - your heart is not pumping blood as well as it should be, and fluid can build up in your body.
- This drug may raise your risk of getting a second cancer, such as acute myeloid leukemia and myelodysplastic syndrome.
- Severe bone marrow suppression, which can be life-threatening. This is a decrease in the number of white blood cells, red blood cells, and platelets. This may raise your risk of infection, make you tired and weak, and raise your risk of bleeding.
- If you have received radiation treatments, your skin may become red after doxorubicin. This reaction is called "radiation recall." Your body is recalling, or remembering, that it had radiation therapy.
- Tumor lysis syndrome: This drug may act on the cancer cells very quickly. This may affect how your kidneys work.

**Note:** Some of the side effects above are very rare. If you have concerns and/or questions, please discuss them with your medical team.

## Important Information

- This drug may be present in the saliva, tears, sweat, urine, stool, vomit, semen, and vaginal secretions. Talk to your doctor and/or your nurse about the necessary precautions to take during this time.
- Urine color may be slightly orange or reddish starting several hours after you get this drug. This will slowly go away within one to two days.

## Treating Side Effects

- Manage tiredness by pacing your activities for the day.
- Be sure to include periods of rest between energy-draining activities.
- To decrease the risk of infection, wash your hands regularly.
- Avoid close contact with people who have a cold, the flu, or other infections.
- Take your temperature as your doctor or nurse tells you, and whenever you feel like you may have a fever.
- To help decrease the risk of bleeding, use a soft toothbrush. Check with your nurse before using dental floss.
- Be very careful when using knives or tools.
- Use an electric shaver instead of a razor.
- Drink plenty of fluids (a minimum of eight glasses per day is recommended).
- If you throw up or have diarrhea, you should drink more fluids so that you do not become dehydrated (lack of water in the body from losing too much fluid).
- To help with nausea and vomiting, eat small, frequent meals instead of three large meals a day. Choose foods and drinks that are at room temperature. Ask your nurse or doctor about other helpful tips and medicine that is available to help stop or lessen these symptoms.
- If you have diarrhea, eat low-fiber foods that are high in protein and calories and avoid foods that can irritate your digestive tracts or lead to cramping.
- Ask your nurse or doctor about medicine that can lessen or stop diarrhea.
- Mouth care is very important. Your mouth care should consist of routine, gentle cleaning of your teeth or dentures and rinsing your mouth with a mixture of 1/2 teaspoon of salt in 8 ounces of water or 1/2 teaspoon of baking soda in 8 ounces of water. This should be done at least after each meal and at bedtime.
- If you have mouth sores, avoid mouthwash that has alcohol. Also avoid alcohol and smoking because they can bother your mouth and throat.
- To help with possible signs of early menopause, vaginal lubricants can be used to lessen vaginal dryness, itching, and pain during sexual relations.
- To help with hair loss, wash with a mild shampoo and avoid washing your hair every day. Avoid coloring your hair.
- Avoid rubbing your scalp, pat your hair or scalp dry.
- Limit your use of hair spray, electric curlers, blow dryers, and curling irons.



- If you are interested in getting a wig, talk to your nurse and they can help you get in touch with programs in your local area.
- If you received radiation, and your skin becomes red or irritated again, follow the same care instructions you did during radiation treatment. Be sure to tell the nurse or doctor administering your chemotherapy about your skin changes.

## Food and Drug Interactions

- This drug may interact with grapefruit and grapefruit juice. Talk to your doctor as this could make side effects worse.
- Check with your doctor or pharmacist about all other prescription medicines and over-the-counter medicines and dietary supplements (vitamins, minerals, herbs and others) you are taking before starting this medicine as there are known drug interactions with doxorubicin. Also, check with your doctor or pharmacist before starting any new prescription or over-the-counter medicines, or dietary supplements to make sure that there are no interactions.
- This drug may interact with St. John's Wort and may lower the levels of the drug in your body, which can make it less effective.

## When to Call the Doctor

Call your doctor or nurse if you have any of these symptoms and/or any new or unusual symptoms:

- Fever of 100.4° F (38° C) or higher
- Chills
- Feeling dizzy or lightheaded
- Wheezing and/or trouble breathing
- Feeling that your heart is beating fast or in a not normal way (palpitations)
- Pain in your chest
- Tiredness that interferes with your daily activities
- Easy bleeding or bruising
- Pain in your mouth or throat that makes it hard to eat or drink
- Nausea that stops you from eating or drinking and/or is not relieved by prescribed medicines
- Throwing up more than 3 times a day
- Diarrhea, 4 times in one day or diarrhea with lack of strength or a feeling of being dizzy
- Swelling of the legs, feet, or ankles
- Weight gain of 5 pounds in one week (fluid retention)
- Signs of tumor lysis: confusion or agitation, decreased urine, nausea/vomiting, diarrhea, muscle cramping, numbness and/or tingling, seizures.
- While you are getting this drug, please tell your nurse right away if you have any pain, redness, or swelling at the site of the IV infusion.
- If you think you may be pregnant or may have impregnated your partner



## Reproduction Warnings

- **Pregnancy warning:** This drug can have harmful effects on the unborn baby. Women of childbearing potential should use effective methods of birth control during your cancer treatment and for 6 months after stopping treatment. Men with female partners of childbearing potential should use effective methods of birth control during your cancer treatment and for 3 months after stopping treatment. Men with pregnant partners should use condoms during your cancer treatment and for at least 10 days after stopping treatment. Let your doctor know right away if you think you may be pregnant or may have impregnated your partner.
- In women, menstrual bleeding may become irregular or stop while you are getting this drug. Do not assume that you cannot become pregnant if you do not have a menstrual period.
- Women may go through signs of menopause (change of life) like vaginal dryness or itching.
- **Breastfeeding warning:** Women should not breastfeed during treatment and for 10 days after stopping treatment because this drug could enter the breast milk and cause harm to a breastfeeding baby.
- **Fertility warning:** In men and women both, this drug may affect your ability to have children in the future. Talk with your doctor or nurse if you plan to have children. Ask for information on sperm or egg banking.

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