

PACKAGE LEAFLET: INFORMATION FOR THE USER

Doxorubicin 2 mg/ml Solution for Injection

Doxorubicin hydrochloride

Read all of this leaflet carefully before you start taking this medicine because it contains important information for you.

- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor or pharmacist.
- This medicine has been prescribed for you only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- If you get any side effects, talk to your doctor or pharmacist. This includes any possible effects not listed in this leaflet. See section 4.

What is in this leaflet:

1. What Doxorubicin 2 mg/ml Solution for Injection is and what it is used for
2. What you need to know before you use Doxorubicin 2 mg/ml Solution for Injection
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1. WHAT Doxorubicin 2 mg/ml Solution for Injection IS AND WHAT IT IS USED FOR

Doxorubicin 2 mg/ml Solution for Injection is an anti-cancer medicine. Often, Doxorubicin 2 mg/ml Solution for Injection is used in combination with other anti-cancer medicines.

Doxorubicin 2 mg/ml Solution for Injection is used to treat the following forms of cancer:

- breast cancer
- cancer of the connective tissue, ligaments, bone, muscle (sarcoma)
- lung cancer
- cancer of the lymphnodes (Hodgkin's disease or non-Hodgkin's lymphoma)
- blood cancer (acute leukaemia)
- cancer of the thyroid gland
- cancer of the ovaries
- bladder cancer
- tumours in children such as neuroblastoma

2. WHAT YOU NEED TO KNOW BEFORE YOU USE Doxorubicin 2 mg/ml Solution for Injection

DO NOT use Doxorubicin 2 mg/ml Solution for Injection

- if you are allergic to doxorubicin, other medicines of the anthracycline or anthracenedione groups (e. g. daunorubicin, mitoxantrone and epirubicin) or any of the other ingredients of this medicine (listed in section 6).
- if you are pregnant or breast-feeding (see "Pregnancy and breast-feeding").

You should not receive Doxorubicin 2 mg/ml Solution for Injection intravenously if you have:

- reduced blood cell production in the bone marrow and sore mouth (severe stomatitis) persisting after a previous treatment with anti-cancer medicines

- generalised infection (infections that affect more than just a small area of the body)
- severe liver problems
- had a heart attack
- impaired heart function
- serious abnormality of the heart beat (arrhythmia)
- if you have already received the maximum lifetime dose of doxorubicin or similar medicines (anthracyclines)

You should not receive the medicine through a catheter into your bladder if you have:

- a tumour that has penetrated the bladder wall
- an urinary tract infection
- bladder inflammation
- problems with the insertion of a catheter (a thin flexible tube)

Warnings and precautions

Talk to your doctor before taking Doxorubicin 2 mg/ml Solution for Injection if you have or have had any of the following medical conditions or illnesses:

- poor blood cell production in the bone marrow
- heart problems
- liver disorders
- kidney disorders

You should also tell your doctor:

- if you have ever received doxorubicin or any similar anti-cancer medicine (anthracycline) for the treatment of cancer
- if you have received radiation treatment to the upper body

Before starting and during treatment with Doxorubicin 2 mg/ml Solution for Injection your doctor will perform the following tests:

- blood counts
- function tests of your heart, liver and kidney

Doxorubicin strongly reduces blood cell production in the bone marrow. This may make you more prone to infections or bleeding (see section 4, "Possible side effects").

Doxorubicin may damage the heart muscle (cardiomyopathy) and lead to heart failure after a certain cumulative (adding up of individual doses) dose (see section 4, "Possible side effects"). The risk for a heart muscle damage is higher if you have previously received medicines that may damage the heart or radiotherapy of the upper body. Your doctor will monitor your heart function carefully during the treatment.

The levels of uric acid (showing that the cancer cells are destroyed) in your blood may be high during treatment (hyperuricaemia). Your doctor will tell you if you need to take any medicine to control this.

A stinging or burning pain can occur at the site of injection if the medicine leaks out of the vein. Tell your doctor immediately if you feel such a pain.

Other medicines and Doxorubicin 2 mg/ml Solution for Injection

Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines.

In particular you should tell your doctor if you are taking or have recently taken:

- medicines similar to doxorubicin (anthracyclines such as daunorubicin, mitoxantrone and epirubicin)

- medicines which can damage the heart (such as certain anti-cancer medicines like 5-fluorouracil, cyclophosphamide, paclitaxel)
- medicines to treat heart disease (such as calcium antagonists or digoxin)
- medicines which can damage the liver (such as 6-mercaptopurine)
- medicine that influences the activity of your immune system (ciclosporin)
- medicine to treat stomach ulcers (cimetidine)
- medicines that lower the uric acid level in your blood
- tranquillizer (phenobarbital)

Tell your doctor if you are currently receiving or have received radiation therapy.

During treatment with Doxorubicin 2 mg/ml Solution for Injection you should not receive any vaccinations. You should also avoid contact with anyone who has recently been vaccinated against polio.

Doxorubicin 2 mg/ml Solution for Injection with drink

Your doctor will tell you to not drink for 12 hours before doxorubicin is given into your bladder.

Pregnancy breast-feeding and fertility

If you are pregnant or breast-feeding, thank you may be pregnant or are planning to have a baby, ask your doctor or pharmacist for advice before taking the medicine.

If you are pregnant, your doctor will give you doxorubicin only if the benefits of the treatment outway the potential harm for the unborn child.

You should use effective contraception during treatment and for 6 months after treatment.

Do not breast-feed while you are treated with Doxorubicin 2 mg/ml Solution for Injection. The medicine can be passed on to the baby through the breast milk.

Driving and using machines

It is not known whether Doxorubicin 2 mg/ml Solution for Injection can affect your ability to drive or to use machinery.

Doxorubicin 2 mg/ml Solution for Injection contains sodium

This medicine contains up to 115 mmol (265 mg) sodium per dose. You should take this into consideration if you are on a controlled sodium diet.

3. HOW TO USE Doxorubicin 2 mg/ml Solution for Injection

Doxorubicin 2 mg/ml Solution for Injection can only be given under supervision by a doctor with experience in cancer treatment. Your doctor will decide about the dose you will receive.

Doxorubicin 2 mg/ml Solution for Injection is given slowly into the tubing of a running infusion into your vein over 2-15 minutes. If you have bladder cancer you may receive Doxorubicin 2 mg/ml Solution for Injection directly into the bladder through a catheter.

If you use more Doxorubicin STADA than you should

Your doctor will ensure that the correct dose for your condition is given. In case of overdose, you may experience increased side effects. Your doctor may give you symptomatic treatment for these side effects, if required.

Inflammation of the lining of mucous membranes (mucositis) and heart problems can occur within 24 hours. Specialist treatment is necessary if any of these problems occur.

Overdose which exceeds the maximum lifetime dose increases the risk of heart problems and may lead to heart failure. Heart failure may occur up to six months after the treatment.

If you have any further questions on the use of this medicine, ask your doctor or pharmacist.

4. POSSIBLE SIDE EFFECTS

Like all medicines, this medicine can cause side effects, although not everybody gets them. Careful monitoring by your doctor is required, because doxorubicin often cause side effects.

Common (may affect up to 1 in 10 people):

- reduced blood cell production in the bone marrow which may lead to fever, infections, blood-poisoning (sepsis), septic shock, bleeding (haemorrhages), deficiency of oxygen in the tissue (hypoxia) or death
- severe heart complications, like damage to the heart muscle or fast, slow or irregular pulse
- nausea (feeling sick)
- vomiting
- diarrhoea
- inflammation of the mucous membranes (mucositis)
- loss of appetite
- hair loss
- bladder inflammation, when doxorubicin is given directly into the bladder

Uncommon (may affect up to 1 in 100 people):

- combination treatment with cytarabine (an anti-cancer medicine) may lead to ulceration or tissue death (necrosis) of the bowel

Rare (may affect up to 1 in 1,000 people):

- serious allergic reactions, causing for instance difficulty in breathing or dizziness
- shivering
- fever
- dizziness
- hives
- rash
- redness along the vein which was used for the injection
- abnormally increased pigmentation of skin and nails
- nail detachment
- sore eyes

Other side effects:

- blood cancer (acute myeloid leukaemia) has been reported in patients treated with doxorubicin in combination with other anti-cancer medicines
- abnormally raised blood levels of uric acid (hyperuricaemia)
- difficulty breathing and shortness of breath (bronchospasm)
- transient increase of liver enzyme blood levels
- increased colouration (hyperpigmentation, like tanning of the skin) in the lining of the mouth
- increased sensitivity of the skin to light (photosensitization) and recurrence of radiation induced skin problems ("radiation recall reaction"). This can lead to symptoms similar to sunburn.

- absence of menstrual bleeding (amenorrhoea)

If Doxorubicin 2 mg/ml Solution for Injection leaks from the vein into the tissue severe skin inflammation, blistering and local tissue breakdown may follow. This may require surgery (including skin grafts).

Your urine may have a reddish colour after you receive Doxorubicin 2 mg/ml Solution for Injection. This is nothing to worry about. Your urine will soon return to its normal colour.

Reporting of side effects

If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. You can also report side effects directly (see details below). By reporting side effects you can help provide more information on the safety of this medicine.

FREEPOST, IMB Pharmacovigilance, Earlsfort Terrace, IRL - Dublin 2.

Tel: +353 1 6764971, Fax: +353 1 6762517, Website: www.imb.ie, E-mail:

imbpharmacovigilance@imb.ie.

5. HOW TO STORE Doxorubicin 2 mg/ml Solution for Injection

Your medicine is stored in a pharmacy and is prepared especially for you by experienced staff based on your doctor's prescription.

Keep this medicine out of the sight and reach of children.

Do not use this medicine after the expiry date which is stated on the vial and outer carton.

Store in a refrigerator (2°C - 8°C).

6. CONTENTS OF THE PACK AND OTHER INFORMATION

What Doxorubicin 2 mg/ml Solution for Injection contains

The active substance is doxorubicin hydrochloride.

The other ingredients are hydrochloric acid, sodium chloride and water for injections.

What Doxorubicin 2 mg/ml Solution for Injection looks like and contents of the pack

This medicine is a solution for injection. The solution is clear and red and is filled in clear glass vials sealed with rubber stoppers and aluminium caps.

The packages contain 1 vial of 5 ml, 25 ml or 75 ml, respectively.

Not all pack sizes may be marketed.

Marketing Authorisation Holder

cell pharm GmbH
Theodor-Heuss-Str. 52
D-61118 Bad Vilbel
Germany

Manufacturer

cell pharm GmbH
Feodor-Lynen-Str. 35
D-30625 Hannover
Germany

This medicinal product is authorised in the Member States of the EEA under the following names:

Denmark	DOXO-cell, injektionsvæske, opløsning
Finland	Doxorubicin STADA 2 mg/ml injektioneste, liuos
Ireland	Doxorubicin 2 mg/ml Solution for Injection
Portugal	DOXO-cell
Netherlands	Doxorubicine HCl CF 2 mg/ml, oplossing voor injectie

This leaflet was last revised in 12/2014

The following information is intended for healthcare professionals only:

Incompatibilities:

Doxorubicin 2 mg/ml Solution for Injection must not be mixed with heparin, as this will result in precipitation. Until detailed compatibility information about miscibility is available, Doxorubicin 2 mg/ml Solution for Injection should not be mixed with other medicinal products except those mentioned in section "Special precautions for disposal and other handling"

Incompatibilities with the following products have been reported:
Aminophyllin, cephalotin, dexamethasone, fluorouracil, hydrocortisone.

Special precautions for disposal and other handling:

Doxorubicin can also be administered as intravenous infusion in physiological saline or glucose solution for infusion 50 mg/ml.

Personnel should be trained in good technique for handling cytotoxic drugs. Pregnant staff should be excluded from working with this drug. Personnel handling this, and all cytotoxic drugs, should wear protective clothing: goggles, gowns and disposable gloves and masks.

If Doxorubicin 2 mg/ml Solution for Injection comes in contact with skin or mucous membranes, the exposed area should be thoroughly washed with soap and water. If the substance gets into the eyes, rinse with water or sterile physiological saline, whereupon an eye specialist should be consulted.

After use, bottles and injection materials, including gloves, should be disposed of according to the rules for cytostatics.

Inactivation of spilled or leaked drug can be obtained with 1% sodium hypochlorite solution or most simply with phosphate buffer (pH > 8) until the solution is destained. All cleaning materials should be disposed of as indicated previously.

Shelf-life after dilution:

Chemical and physical in-use stability after dilution in physiological saline solution or glucose solution for infusion 50 mg/ml has been demonstrated for 7 days when stored protected from light in a refrigerator and for 1 day when stored not protected from light at room temperature.

From a microbiological point of view, the product should be used immediately. If not used immediately, in-use storage times and conditions prior to use are the responsibility of the user and should normally not be longer than 24 hours at 2-8 °C, unless dilution has taken place in controlled and validated aseptic conditions.