Package leaflet: Information for the PatientDOXORUBICIN "EBEWE" 2 MG/ML CONCENTRATE FOR SOLUTION FOR INFUSION
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 side effects not listed in this leaflet. See section 4.

What is in this leaflet:

1. WHAT <PRODUCT NAME> IS AND WHAT IT IS USED FOR

<Product name> belongs to a group of medicines known as antineoplastic or anticancer medicines. It also belongs to a sub-group of anticancer medicines called anthracyclines. Doxorubicin is used to treat a wide range of tumours and also some leukaemias (which are a form of cancer of the blood cells).
Your doctor will be able to explain how doxorubicin might help in your particular condition.

It is used to treat:
- Cancer of the soft tissue (soft tissue sarcomas)
- Cancer of the bone (osteogenic sarcomas)
- cancers of the lymphatic system (Hodgkin´s disease and Non-Hodgkin´s lymphoma)
- Cancers of the blood (acute lymphoblastic leukaemia and acute myeloblastic leukaemia)
- Cancer of the thyroid
- Cancer of the breast
- Cancer of the ovary
- Cancer of the bladder
- Cancer of the lung (small cell bronchogenic carcinoma)
- Neuroblastoma (a solid tumour outside the brain)

2. WHAT YOU NEED TO KNOW BEFORE YOU ARE GIVEN <PRODUCT NAME>
You should not be given <Product Name> if you:
- are allergic (hypersensitive) to doxorubicin, other similar drugs, or any of the other ingredients of <Product Name> (see list of ingredients in Section 6). An allergic reaction may include rash, itching, difficulty breathing or swelling of the face, lips, throat or tongue.
- are pregnant or breast-feeding
- have a decreased production of blood cells, e.g. caused by previous treatment
- have heart failure
- have been given the maximum dose of <Product Name> or daunorubicin (a similar drug)
- have mouth ulcers

- have certain problems with your bladder (your doctor will know what these are)

Warnings and precautions
You will have heart, liver and blood tests before treatment. Men as well as women should take effective contraceptive measures during and for at least three months after <Product Name> therapy. The first treatment may cause your urine to become red; this is normal.

Tell your doctor if you have any of the following conditions

- a heart disorder or a history of heart disorder
- you have been treated with a drug that might have damaged your heart, e.g. cyclophosphamide

Tell your doctor if you develop any of the following conditions during treatment:
- pain or burning at the injection site
- if you notice sores, discolouration or any discomfort in your mouth

Other medicines and <Product Name>
Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines.
, e.g.:
- other treatments for cancer, e.g. cyclophosphamide
- drugs that might damage the heart (your doctor will know which these are)
- verapamil (a treatment for high blood pressure or angina)
- drugs that might damage the liver, e.g. methotrexate (your doctor will know which these are)
- cyclosporin (a drug used to prevent rejection after a transplant)
- drugs such as cimetidine, ranitidine, rifampicin, or barbiturates that affect certain liver enzymes (your doctor will know what these are)
- radiation therapy

Pregnancy and breast-feeding
You should not be given <Product Name> while pregnant or breast-feeding as it might harm the baby.

Driving and using machines
<Product Name> may cause sleepiness, nausea (feeling sick) or vomiting. If affected you should not drive or use machines.

3. HOW YOU ARE GIVEN <PRODUCT NAME>
<Product Name> will only be given by a doctor or nurse under the supervision of a doctor who has experience in the use of chemotherapy. <Product Name> may be given by injection into a running infusion over 2-5 minutes or as an infusion.

Adults and the elderly
The dose depends on the type of cancer, the condition of your heart and kidneys, and other treatment you may be receiving.

The usual dose when <Product Name> is given alone is 60-75 mg per square meter (of body area), once every three weeks. The maximum total dose is 550 mg per square meter.

Patients with a liver disorder may need a reduced dose.

Children
Children will need a reduced dose

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

4. POSSIBLE SIDE EFFECTS

Like all medicines, this medicine can cause side effects, although not everybody gets them.

All medicines can cause allergic reactions, although serious allergic reactions are very rare. **Tell your doctor straight away if you get any sudden wheeziness, difficulty in breathing, swelling of the eyelids, face or lips, rash or itching (especially affecting your whole body).**

The following side effects have been reported:

Very common (may affect more than 1 in 10 people)

- changes in the number of blood cells and platelets
- feeling sick (nausea)
- vomiting
- inflammation of the mouth, rectum, vagina, or gullet
- diarrhoea
- ulcers, bleeding, and holes in the digestive tract
- temporary hair loss
- discoloured nails
- skin wrinkles
- separation of nails.
- at the injection site <Product Name> may cause pain, irritation, inflammation, blood clots in the vein, leading to serious ulcers and skin damage.
- Hyperuricaemia (high level of uric acid) which may lead to gout
- Inflammation of the heart (pericarditis and myocarditis) may occur

Common (may affect up to 1 in 10 people)

- damage to the heart
- temporary increases of liver enzymes (these can be detected by a test carried out by a doctor)
- <Product Name> and radiation treatment to the liver may cause severe liver damage.
- blood in the urine
- irritation of the bladder and tube leading to the outside of the body
- painful urination
- large amounts of urine
- bleeding cystitis that causes a decrease in bladder capacity and red urine

Uncommon (may affect up to 1 in 100 people)

- Children may be at increased risk of later development of certain types of leukaemia, particularly a special subtype called acute myeloid leukaemia (AML)

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

- cancer (benign and malignant)
- red eye and weeping (conjunctivitis, lacrimation)
- facial flushing may occur if the injection is given too quickly

Very rare (may affect up to 1 in 10,000 people)

- Inflammation of the veins (thrombophlebitis)
- Some singular cases of problems with the lungs (pulmonary toxicity) have been reported:breathing problems (tachypnoe, dyspnoea), pleural effusion, certain types of pneumonia (bronchiolitis obliterans organizing pneumonia), different breathing problems which can even become life-threatening (bronchocentric granulomatosis/life-threatening respiratory depression, postpneumonectomy-like syndrome, interstitial pneumonits, radiation pneumonitis, pulmonary embolism).

Especially when you have combined treatment with other cytotoxic drugs (esp. gemcitabine, bleomycin, taxane or rituximab combinations) with or without radiotherapy as well as when your lung function is already bad, lung problems are more likely to occur.

Not known (frequency cannot be estimated from the available data)

- allergic reactions such as rashes, itching, swelling, and fever
- clots in the blood vessels and red eyes
- acute and painful red discoloration of the palms of the hands and soles of the feet
- oral cancer may occur

As a general rule intensive treatment of cancer can result in impairment of growth and disturbed function of hormone-producing glands. Doxorubicin can contribute to growth failure. Late effects of Doxorubicin with respect to hormone-producing glands have not been observed.

Reporting of side effects

If you get any side effects, talk to your doctor or nurse. This includes any side effects not listed in this leaflet.You can also report side effects directly via [TO BE COMPLETED NATIONALLY]. By reporting side effects you can help provide more information on the safety of this medicine.

5. HOW TO STORE <PRODUCT NAME>

Your doctor or pharmacist knows how to store <Product Name>.
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 label and carton after {abbreviation used for expiry date}. The expiry date refers to the last day of that month.
Store in a refrigerator (2-8°C).
Storage of the medicinal product at refrigerated conditions can result in the formation of a gelled product. This gelled product will return to a slightly viscous to mobile solution after 2 to a maximum of 4 hours equilibration at controlled room temperature (15° to 25°C).
Keep the vial in the outer carton in order to protect from light.

6. CONTENTS OF THE PACK AND OTHER INFORMATION

What <Product Name> contains:

The active substance is doxorubicin hydrochloride 2 mg/ml.
Each 5 ml vial contains 10 mg of doxorubicin hydrochloride.
Each 25 ml vial contains 50 mg of doxorubicin hydrochloride
Each 50 ml vial contains 100 mg of doxorubicin hydrochloride
Each 100 ml vial contains 200 mg of doxorubicin hydrochloride

The other ingredients are: hydrochloric acid, sodium chloride and water for injection

What <Product Name> looks like and contents of the pack

<Product Name> is a clear, red coloured solution, filled in clear glass vials with grey rubber stopper and aluminium caps.
Package sizes: 5 ml, 25 ml, 50 ml, and 100 ml vials.
Not all pack sizes may be marketed

Marketing Authorisation Holder

To be completed nationally.

Manufacturer

To be completed nationally.

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

Ireland	Doxorubicin “Ebewe” 2 mg/ml, Concentrate for solution for infusion
Belgium	Doxorubicine Sandoz 2 mg/ml, concentraat voor oplossing voor infusie
Italy	Doxorubicina Sandoz
Luxembourg	Doxorubicine Sandoz 2mg/ml solution injectable
Netherlands	Doxorubicine HCl Sandoz 2mg/ml, concentraat voor oplossing voor infusie

This leaflet was last revised in {MM/YYYY}.

The following information is intended for medical and healthcare professionals only:

Instructions for use/handling
For single use only.

Observe guidelines for handling cytotoxic drugs.

The following protective recommendations are given due to the toxic nature of this substance:
- Personnel should be trained in good techinque for handling.
- Pregnant staff should be excluded from working with this drug.
- Personnel handling doxorubicin should wear protective clothing: goggles, gowns and disposable gloves and masks.
- All items used for administration or cleaning, including gloves, should be placed in high risk waste disposal bags for high temperature (700°C) incineration.

Accidental contact with the skin or eyes should be treated immediately by copious lavage with water, or soap and water, or sodium bicarbonate solution: medical attention should be sought.

Spillage or leakage should be treated with dilute sodium hypochlorite (1% available chlorite) solution, preferably soaking overnight and then rinse with water.

All cleaning materials should be disposed of as indicated previously.

Recommended infusion solutions are Sodium Chloride Intravenous Infusion 0.9% w/v, Glucose Intravenous Infusion 5% w/v or Sodium Chloride and Glucose Intravenous Infusion.

Because of the various existing dosage schemes the use is only recommended under the direction of those experienced in cytotoxic therapy.

Incompatibilities
Contact with any solution of an alkaline pH should be avoided as it will result in hydrolysis of the drug. Doxorubicin should not be mixed with heparin and 5-fluororuacil as a precipitate may form and it is not recommended that doxorubicin be mixed with other drugs.

Administration
Doxorubicin may be given by
intravenous (bolus) injection over 2-5 minutes or as continuous infusion into a running infusion of sodium chloride 0.9% w/v intravenous injection, dextrose intravenous injection 5% w/v or sodium chloride and dextrose intravenous injection.

Storage and shelf-life
Medicinal product as packaged for sale: 2 years.

Remove solution from vial immediately before use.

Shelf life after dilution: Chemical and physical in-use stability has been demonstrated up to 24 hours at 2-8°C.
In use: 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 would normally not be longer than 24 hours at 2 to 8 °C, unless dilution has taken place in controlled and validated aseptic conditions.

Special precautions for storage
Store in a refrigerator (at 2-8°C).

Storage of the medicinal product at refrigerated conditions can result in the formation of a gelled product. This gelled product will return to a slightly viscous to mobile solution after 2 to a maximum of 4 hours equilibration at controlled room temperature (15° to 25°C).

Keep the vial in the outer carton in order to protect from light.