Package leaflet: Information for the patient
Epirubicin Hydrochloride 2 mg/ml solution for injection or infusion
epirubicin hydrochloride

The name of your medicine is 'Epirubicin Hydrochloride 2 mg/ml solution for injection or infusion' but in the rest of the leaflet it will be called 'Epirubicin Hydrochloride Injection'.

Read all of this leaflet carefully before you are given 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, pharmacist or nurse.
- If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

What is in this leaflet:

1. What Epirubicin Hydrochloride Injection is and what it is used for

The name of your medicine is 'Epirubicin Hydrochloride 2 mg/ml solution for injection or infusion' but in the rest of the leaflet it will be called 'Epirubicin Hydrochloride Injection'.

What Epirubicin Hydrochloride Injection is
Epirubicin Hydrochloride Injection is an anti-cancer medicine. Treatment with an anti-cancer medicine is sometimes called cancer chemotherapy. Epirubicin Hydrochloride Injection is part of a group of medicines called anthracyclines. These act upon cells that are actively growing, to slow or stop their growth and increase the chance that the cells die.

What Epirubicin Hydrochloride Injection is used for
Epirubicin Hydrochloride Injection is used to treat a variety of cancers, either alone or in combination with other drugs. The way in which it is used depends upon the type of cancer that is being treated.

Epirubicin Hydrochloride Injection is used in the treatment of cancers of the breast, lung, ovary and stomach.
When injected into the bladder through a tube, Epirubicin Hydrochloride Injection is used to treat abnormal cells or cancers of the bladder wall. It can also be used after other treatments for prevention of such cells from growing again.

You must talk to a doctor if you do not feel better or if you feel worse.

2. What you need to know before you are given Epirubicin Hydrochloride Injection

Do not use Epirubicin Hydrochloride Injection
- if you are allergic to epirubicin or any of the other ingredients of this medicine (listed in section 6) or similar chemotherapy drugs (anthracyclines or anthracenediones)
- if you are breast-feeding
- if you have decreased ability to produce blood cells leading to low blood cell counts, as it can lower them further
- if you have severe liver disease
- if you have suffered from recent heart attack, poor functioning of the heart muscle, severe irregular heartbeat pattern, sudden pain in the chest, non-inflammatory disease of the heart muscle or any other severe heart trouble in the past, or are presently receiving treatment for this
- if you have previously been treated with Epirubicin Hydrochloride injection or similar chemotherapy drugs, as previous treatment with these medicines can increase the risk of side effects
- if you have acute severe infections that may affect multiple organs

Epirubicin Hydrochloride Injection must not be administered directly into the bladder (administration intravesical):

- if you have urine infection
- if you have inflammation of the bladder
- if you have invasive tumours penetrating the bladder wall
- if you have catheterisation problems (your doctor has problems inserting a catheter (tube) into your bladder)
- if you have presence of blood in urine

Warnings and precautions
Talk to your doctor, pharmacist or nurse before using Epirubicin Hydrochloride injection:

- if your liver or kidneys are not working properly
- if you have had or you are due to have any vaccination
- if you are elderly because of the higher risk of serious cardiovascular side effects. Your cardiac function will be studied before and after treatment with epirubicin
- if you have a history of heart problems or are suffering from heart problems. Tell your doctor as your epirubicin dose may need to be adjusted. Your doctor will check this regularly
- if you have been previously treated with anticancer drugs, or if you have received radiotherapy as the risk of cardiovascular side effects are greater. This can have an impact on the dosing of epirubicin
- if you suffer from infections or bleeding. Epirubicin may affect the bone marrow. The number of white blood cells in your blood will be reduced, making you more susceptible to infections (leukopenia). Bleeding can occur more easily (thrombocytopenia). These side effects are transient. Reduction of white blood cell count is highest 10-14 days after administration and usually return to normal 21 days after submission.
- if you are currently suffering from acute toxicities such as
  - acute inflammation of the mouth
  - low white blood cell count
  - low platelet count or
  - infections in general
- if you are currently taking or have recently taken trastuzumab (a medicine used in the treatment of certain cancers). Trastuzumab can remain in the body for up to 7 months. As trastuzumab may affect the heart, you should not use Epirubicin Hydrochloride Injection for up to 7 months after you have stopped taking trastuzumab. If Epirubicin Hydrochloride Injection is used before this time, then your heart function should be carefully monitored.
- if you have received or will receive radiotherapy on the chest area
- if you are pregnant. There have been reports in pregnant women in which epirubicin was associated with heart problems in newborns and unborn babies, including foetal death.

This will help your doctor decide if this medicine is suitable for you.

Talk to your doctor or nurse if any of the following conditions occur or get worse **DURING** treatment with Epirubicin Hydrochloride Injection (see also section 4 “Possible side effects”):

- **heart problems** that can be:
  - **acute** (occurring immediately after the start of treatment): increase or decrease in the frequency of heartbeats and changes in the rhythm of beats (arrhythmias). These disturbances are easily seen by performing an electrocardiogram (ECG) examination and are not important enough to require discontinuation of treatment with this medicine;
  - **delayed (usually occurring a long time after the start of treatment. The most common signs of delayed toxicity are:**
    inability of the heart to supply blood in sufficient quantity to meet the body’s demands (heart failure or cardiac insufficiency). The most common symptoms are difficulty in breathing (dyspnoea), accumulation of fluid in the lungs (pulmonary oedema), swelling in other parts of the body, especially in the legs and ankles (dependent oedema), enlargement of the heart (cardiomegaly) and liver (hepatomegaly), reduced urine production (oliguria), accumulation of fluid in the abdomen (ascites) and in the space between the lungs and the chest (pleural effusion), altered heartbeat (gallop rhythm). Sometimes heart failure can be serious and result in death.

- decrease in the total number of **white** blood cells in the blood (leukopenia) or a type of white blood cells called neutrophils (neutropenia) or of **platelets** (thrombocytopenia) or of **red blood cells** (anaemia). Generally, the

decrease in white blood cells is greatest 10-14 days after the start of treatment and then returns to normal levels by day 21. Sometimes, the consequences of the decrease in the blood of these cells can be serious with fever, infections in various organs and blood, shock, haemorrhage, decreased oxygen to the brain and death.
- cancer of the white blood cells (**leukaemia**) that was not present before the start of the epirubicin treatment (secondary leukaemia). Leukaemia may appear 1-3 years after the end of treatment with epirubicin and is more likely to occur if this medicine is administered at high doses or in combination with other anticancer drugs or radiotherapy.
- vomiting and inflammation of the mucous membrane of the mouth (stomatitis). In serious cases, ulcers of the mucous membranes may also appear. These lesions generally disappear by the third week of treatment.
- **Liver problems**, as the danger of this medicine causing toxic effects throughout the body increases. Your doctor will adjust the dosage of epirubicin according to your condition;
- inflammation of the veins (phlebitis) into which epirubicin has been repeatedly injected
- inflammation and blockage of the vein (thrombophlebitis)
- a burning sensation at the site of administration. This could indicate epirubicin is leaking outside the blood vessel. Tell your doctor immediately
- excessive increase in the amount of **uric acid** in the blood;
- inflammation and formation of blood clots in the veins, mainly in the legs, pelvis (**thrombophlebitis**) and lungs (**pulmonary embolism**). In some cases, pulmonary embolism can lead to death.

Tell your doctor or nurse if any of the following conditions occur or get worse **DURING** the administration of Epirubicin Hydrochloride Injection directly into the bladder (**intravesical administration**) (see also section 4 "Possible side effects")
- difficulty urinating (dysuria), frequent production of small amounts of urine without simultaneous fluid intake (pollakiuria), frequent need to urinate during the night (nocturia), painful, slow and intermittent emission of urine often in drops (stranguria), presence of blood in the urine (haematuria), bladder discomfort, necrosis of the inner bladder wall, bladder compression.

Your doctor will also be making regular checks during treatment with Epirubicin Hydrochloride Injection:

- so that your blood cell counts will not be too low
- to control the levels of uric acid and other factors in the blood
- to see that your heart and liver are working normally

During treatment with Epirubicin Hydrochloride Injection, you should not undergo vaccination with so called "**live**" or "**attenuated**" vaccines, because, due to low immune defenses, serious or fatal infections may occur. You can, however, undergo vaccination with vaccines called "killed" or "inactivated", although the effect of this type of vaccination may be reduced.

This medicine can cause irreversible damage that may also affect your future children. Therefore, women of childbearing potential should be informed about the need to use an effective contraceptive methods during treatment with Epirubicin Hydrochloride Injection. If you wish to have children after stopping treatment, consult a medical specialist. Before treatment, both men and women must seek advice on methods to preserve fertility (see section 2 "Pregnancy, breast-feeding and Fertility").

Before and during treatment with Epirubicin Hydrochloride Injection, your doctor will carry out frequent and regular laboratory checks to evaluate your condition and the effectiveness of this medicine.

Other medicines and Epirubicin Hydrochloride Injection

Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines, even those obtained without a prescription, particularly the following:
- **Cimetidine** (a drug usually used to treat stomach ulcers and heartburn). Cimetidine can make the effects of Epirubicin Hydrochloride Injection stronger.
- **Calcium channel blockers** (medicines for the heart).
- **Interferon α2b** (used to treat cancers)
- **Quinine** (antimalaria drug).
- **Antibiotics** such as sulphonamide and chloramphenicol.
- **Antiretroviral** (drugs used to treat infection by HIV).
- **Diphenylhydantoin** (a drug used to treat epilepsy).

- **Painkillers** such as amidopyrine derivative.
- **Dexverapamil** (used to treat some heart conditions).
- **Trastuzumab t**herapy for treatment of cancer Your doctor should avoid using Epirubicin Hydrochloride injection for up to 7 months after stopping trastuzumab when possible. If Epirubicin Hydrochloride Injection is used before this time, careful monitoring of cardiac function is recommended.
- **Dexrazoxane** (used to prevent chronic cumulative cardiotoxicity caused by epirubicin)
- **Vaccination** with a live vaccine should be avoided in patients receiving epirubicin
- **Paclitaxel or docetaxel** (drugs used to treat cancer). When paclitaxel is given prior to epirubicin, it may increase concentration of epirubicin in blood. However when paclitaxel and docetaxel are given together and given after epirubicin, they did not affect concentration of epirubicin.
- antibiotics such as sulphonamides and certain diuretics ("water tablets"); additive effect on increased uric acid level in the blood by epirubicin.
- heparin (medicine that prevents the blood from clotting); can lead to loss of effectiveness of both epirubicin and heparin.

Pregnancy, breast-feeding and fertility
If you are pregnant, think you may be pregnant or are planning to have a baby, ask your doctor for advice before being given this medicine.

Pregnancy
Avoid becoming pregnant while you or your partner is being treated with this medicine. If you are sexually active, you are advised to use effective birth control to prevent pregnancy during treatment, whether you are male or female. It may cause birth defects, so it is important to tell your doctor if you think you are pregnant**.**

Breast feeding
Do not breast feed during treatment with this medicine and for at least 7 days after the last dose.

Fertility
Epirubicin may have negative effects on the fertility of men and women.

Men: There is a risk of sterility due to therapy with epirubicin and male patients should consider storage of sperm before treatment. Male patients treated with epirubicin are advised not to father a child during treatment and for at least 4 months after treatment.

Women: Epirubicin may cause lack of menstrual cycles or premature menopause in premenopausal women. Female patients treated with epirubicin are advised not to become pregnant during treatment and for at least 7 months after treatment.

Driving and using machines
There are no special precautions, as long as you feel fully recovered following your hospital treatment and you have discussed this with your doctor.

Epirubicin Hydrochloride Injection contains sodium
This medicine contains less than 1 mmol sodium (23 mg) per ml, that is to say essentially 'sodium free'.

3. How Epirubicin Hydrochloride Injection is given to you

If you are prescribed Epirubicin Hydrochloride Injection it will only be given to you by doctors or nurses experienced in giving chemotherapy.

This medicine will normally be given to you by a doctor or a nurse through a drip (infusion) into a vein. Your doctor will decide what dose to give and the number of days' treatment you will receive depending on your condition.

The dose is decided by taking into account the condition you have, your height and weight. From your height and weight the doctor will work out your body surface area, and it is this that your dose is calculated from.
Epirubicin Hydrochloride Injection can also be put directly into the bladder to treat bladder cancer, or to help prevent it returning. The dose depends on the type of bladder cancer you have. When this medicine is injected directly into the bladder, you will be instructed not to drink any fluid for 12 hours before treatment to avoid dilution of the medicine with urine in your bladder.

While one course of treatment may sometimes be enough, more often your doctor will advise further courses in three or four weeks' time. It may take several courses before your illness is under control and you feel better.

Regular checks by your doctor during Epirubicin Hydrochloride Injection treatment

During treatment your doctor will be making regular checks of your:

- **Blood** - to check for low blood cell counts that may need treatment
- **Heart function** - heart damage can occur when high doses of Epirubicin Hydrochloride Injection are given. This may not be detected for several weeks, so regular tests may be required during this period
- **Liver** – using blood tests to check that this medicine is not affecting the way it functions in a harmful way
- **Blood uric acid levels** – Epirubicin Hydrochloride Injection may increase uric acid levels in the blood which might cause gout. Another medicine may be given if your uric acid levels are too high.

If you receive more Epirubicin Hydrochloride Injection than you should:

High doses can worsen side effects like sores in the mouth or may decrease the number of white blood cells (which fight infection) and platelets (these help the blood to clot) in the blood. Should this happen, you may need antibiotics or blood transfusions. Mouth ulcers can be treated to make them less uncomfortable as they heal.
If you have any further questions on the use of this medicine, ask your doctor, pharmacist or nurse.

4. Possible side effects

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

Most serious side effects
If you notice any of the following side effects, tell your doctor straight away as you may need urgent medical attention or hospitalization:

Very common: (may affect more than 1 in 10 people)
- significant reduction in the production of blood cells in the bone marrow (myelosuppression) which can cause:
  - decreased white blood cell counts (which fight infection), which increases the chance of infections and fever; (leukopenia)
  - decreased platelets in the blood (help the blood to clot), which could make you bruise or bleed more easily (thrombocytopenia)
  - a decrease in the number of certain types of white blood cells – granulocytes and neutrophils (granulocytopenia and neutropenia)
  - a decrease in the number of certain types of white blood cells accompanied by fever (febrile neutropenia)
  - a decrease in the number of red blood cells (anaemia) which could make you tired and lethargic.
- inflammation of the veins (phlebitis)

Common: (may affect up to 1 in 10 people)
- reduced heart function (heart failure) (see section 2 "Warnings and precautions"). Heart problems can manifest themselves with difficulty breathing (dyspnoea), swelling of different parts of the body due to accumulation of fluid especially in the feet, ankles, legs and arms, enlargement of the liver, presence of fluid and enlargement in the abdomen (ascites), presence of fluid in the space between the lung or chest (pleural effusion)
- serious heart rhythm disturbance (ventricular arrhythmia)
- certain forms of heart rhythm disorders (atrioventricular block, branch block)
- slow heart rate (bradycardia)
- loss of blood from blood vessels (haemorrhage)
- pain or burning in the gastrointestinal tract
- ulcers of the gastrointestinal tract
- inflammation of the mucosa of the gastrointestinal tract

Uncommon: (may affect up to 1 in 100 people)
- certain types of blood cell cancer (acute lymphatic leukaemia, acute myeloid leukaemia) (see section 2 "Warnings and precautions")
- high fever, chills, general malaise, possible feeling of cold arms and legs due to blood infection

- blockage of a vein by blood clot (embolism) which can break off and be carried by the bloodstream to the lungs which can cause pain and shortness of breath (pulmonary embolism)
- blockage of an artery (arterial embolism)
- swelling and pain in the legs or arms due to inflammation of a blood vessel due to injections of the medicine which have been given repeatedly (see section 2 "Warnings and precautions") or occlusion of a vessel caused by a blood clot
- loss of blood from the gastrointestinal tract (gastrointestinal haemorrhage)

Rare: (may affect up to 1 in 1,000 people)
- sudden life-threatening allergic reaction. Symptoms include sudden signs of allergy such as rash, itching or hives on the skin, swelling of the face, lips, tongue or other parts of the body, shortness of breath, wheezing or trouble breathing
- absence of spermatozoa in the semen
- allergic reactions following administration of Epirubicin Hydrochloride Injection directly into the bladder

Not known: (frequency cannot be estimated from the available data)
- life-threatening condition that occurs when the blood pressure is too low due to blood poisoning (shock)
- abdominal discomfort
- septic shock
- lack of oxygen to the tissues
- tissue death (tissue necrosis) as a result of the medicine leaking from the vein where the needle was inserted. In this case the administration of Epirubicin Hydrochloride Injection will be discontinued immediately (see section 2 "Warnings and precautions")

Other side effects:

Very common: (may affect more than 1 in 10 people)
- infections
- eye inflammation with red eyes and watery eyes (conjunctivitis)
- inflammation of the transparent part of the eye called the cornea (keratitis)
- hot flushes
- nausea
- vomiting
- inflammation of the mucous lining in the mouth (stomatitis)
- fever
- diarrhoea
- hair loss (alopecia)
- skin lesion
- reddish colouring of urine (for 1 to 2 days from the time of administration of Epirubicin Hydrochloride Injection)
- absence of menstruation (amenorrhoea)
- painful inflammation and ulceration of the mucous membranes lining the digestive tract
- feeling generally unwell
- changes in levels of some liver enzymes (transaminases)
- inflammation of the bladder (chemical cystitis) following intravesical administration. The symptoms may be: difficulty urinating (dysuria), frequent production of small amounts of urine without simultaneous fluid intake (pollakiuria), frequent need to urinate during the night (nocturia), painful, slow and intermittent emission of urine often in drops (stranguria), presence of blood in the urine (haematuria), bladder discomfort, necrosis of the inner wall of the bladder (see section 2 "Warnings and precautions")

Common: (may affect up to 1 in 10 people)
- reduced appetite/loss of appetite
- lose water or fluids from the body (dehydration)
- decrease in the amount of blood pumped by the heart into the body (left ventricular ejection fraction)
- redness of the skin (flushing)
- inflammation of the lining of the oesophagus (oesophagitis)
- rash, itching, skin change, darker colouration of skin and nail (hyperpigmentation)

- need to urinate more often than normal following administration of Epirubicin Hydrochloride Injection directly into the bladder
- chills
- irritation at the injection site
- burning sensation following administration of Epirubicin Hydrochloride Injection directly into the bladder

Uncommon: (may affect up to 1 in 100 people)
- lung infection (pneumonia)
- urticaria
- erythema
- muscle weakness (asthenia)

Rare: (may affect up to 1 in 1,000 people)
- increased levels of uric acid in the blood (hyperuricemia)
- electrocardiogram (ECG) abnormalities due to disturbances in heart function
- light headedness

Not known: (frequency cannot be estimated from the available data)
- lesion of the mucous membranes of the mouth, pain and burning sensation of the mucous membranes
- blood loss from the mouth and appearance of dark spots inside the mouth
- redness or other sunburn-like skin reactions when exposed to sunlight or to ultraviolet rays (for example, in a solarium)
- increase sensitivity of the skin previously affected by radiation treatment
- pain at the injection site
- cellulitis
- thickening of the blood vessel walls (phlebosclerosis)

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 via
HPRA Pharmacovigilance
Website: www.hpra.ie
By reporting side effects you can help provide more information on the safety of this medicine.

5. How to store Epirubicin Hydrochloride Injection

Store in a refrigerator (2°C – 8°C). Do not freeze.

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

Always keep Epirubicin Hydrochloride Injection in a safe place and out of the reach and sight of children.

Do not use Epirubicin Hydrochloride Injection after the expiry date, which is printed on the label and carton after EXP. The expiry date refers to the last day of that month.

Do not use Epirubicin Hydrochloride Injection if you notice any visible signs of deterioration.

Medicines should not be disposed of via wastewater or household waste. Ask your pharmacist how to dispose medicines no longer required. These measures will help to protect the environment.

6. Contents of the pack and other information

What Epirubicin Hydrochloride Injection contains:

The active ingredient in Epirubicin Injection is Epirubicin Hydrochloride.
Each ml contains 2 mg Epirubicin Hydrochloride.
Other ingredients include sodium chloride, hydrochloric acid and water for injection.

What Epirubicin Hydrochloride Injection looks like and content of the pack:
Epirubicin Injection is a clear, red coloured solution.

Pack sizes:
1 x 5 ml vial (10 mg/5 ml)
1 x 10 ml vial (20 mg/10 ml)
1 x 25 ml vial (50 mg/25 ml)
1 x 50 ml vial (100 mg/ 50 ml)
1 x 100 ml vial (200 mg/100 ml)

5 and 10 ml vials: Type I tubular glass vial with 20 mm chlorobutyl RTS rubber stopper and aluminium flip-off white seal.
25 ml vial: Type I tubular glass vial with 20 mm chlorobutyl RTS rubber stopper and aluminium flip-off white/royal blue seal.
50 ml vial: Type I clear moulded glass vial with 20 mm chlorobutyl RTS rubber stopper and aluminium flip-off royal blue seal.
100 ml vial: Type I clear moulded glass vial with 20 mm chlorobutyl RTS rubber stopper and aluminium flip-off white / royal blue seal.

Pack size: 1 vial.

Not all pack sizes may be marketed

Marketing Authorisation Holder:

Accord Healthcare Ireland Ltd,
Euro House,
Euro Business Park,
Little Island,
Cork T45 K857,
Ireland

Manufacturer:
Laboratori FUNDACIO DAU,
C/ De la letra C, 12-14,
Poligono Industrial de la Zona Franca,
08040 Barcelona,
Spain

Accord Healthcare Polska Sp.z o.o.,
ul. Lutomierska 50,95-200 Pabianice, Poland

Accord Healthcare Single Member S.A.
64th Km National Road Athens,
Lamia, Schimatari, 32009, Greece

This medicine is authorised in the Member States of the European Economic Area and in the United Kingdom (Northern Ireland) under the following names:

Name of the Member State	Name of the medicine
Austria	Epirubicin Hydrochloride Accord 2 mg/ml, Lösung zur Injektion oder Infusion
Belgium	Epirubicine Accord Healthcare 2 mg/ml solution pour injection ou perfusion
Czechia	Epirubicin Accord 2 mg/ml injekční/infuzní roztok
Denmark	Epirubicin Accord
Estonia	Epirubicin Accord, 2 mg/ml süste- või infusioonilahus
Finland	Epirubicin Accord 2 mg/ml, injektio- tai infuusioneste, liuos / Lösning för injektion och infusion

Hungary	Epirubicin Accord 2 mg/ml oldatos injekció vagy infúzió
Ireland	Epirubicin Hydrochloride 2 mg/ml solution for injection or infusion
Italy	Epirubicina AHCL 2 mg/ml soluzione iniettabile o per infusione
Latvia	Epirubicin Accord 2 mg/ml šķīdums injekcijām vai infūzijām
Lithuania	Epirubicin Accord 2 mg/ml injekcinis ar infuzinis tirpalas
Netherlands	Epirubicinehydrochloride Accord 2 mg/ml oplossing voor injectie of infusie
Norway	Epirubicin Accord 2 mg/ml injeksjonsvæske/infusjonsvæske, oppløsning
Poland	Epirubicin Accord
Portugal	Epirrubicina Accord
Slovakia	Epirubicin Accord 2 mg/ml injekčný alebo infúzny roztok
Spain	Epirubicin Hydrochloride Accord 2 mg/ml para inyección o infusión EFG
Sweden	Epirubicin Accord 2 mg/ml injektions-/infusionsvätska, lösning
United Kingdom (Northern Ireland)	Epirubicin Hydrochloride 2 mg/ml solution for injection or infusion

This leaflet was last revised in June 2025

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

Incompatibilities

Prolonged contact of the medicinal product with any solution of alkaline pH (including sodium bicarbonate solutions) should be avoided; this will result in hydrolysis (degradation) of the active substance. Only the diluents detailed in section "Instructions for use" should be used.

Neither the injection nor any diluted solution should be mixed with any other drugs. A physical incompatibility with heparin has been reported.

Epirubicin hydrochloride should not be mixed with other drugs.

Instructions for use

Intravenous administration: It is advisable to administer Epirubicin Hydrochloride Injection via the tubing of a freely flowing intravenous infusion (0.9% sodium chloride). To minimize the risk of thrombosis or perivenous extravasation, the usual infusion times range between 5 and 10 minutes depending upon dosage and volume of the infusion solution. A direct push injection is not recommended due to the risk of extravasation, which may occur even in the presence of adequate blood return upon needle aspiration.

Intravesical administration: Epirubicin Hydrochloride Injection should be diluted in sterile water for injection or 0.9% sterile saline solution before administration. Epirubicin should be instilled using a catheter and retained intravesically for 1 hour. During instillation, the patient should be rotated to ensure that the vesical mucosa of the pelvis receives the most extensive contact with the solution. To avoid undue dilution with urine, the patient should be instructed not to drink any fluid in the 12 hours prior to instillation. The patient should be instructed to void at the end of the instillation,

The injection solution contains no preservative and any unused portion of the vial should be discarded immediately.

Guidelines for the safe handling and disposal of antineoplastic agents:

1. If an infusion solution is to be prepared, this should be performed by trained personnel under aseptic conditions.
2. Preparation of an infusion solution should be performed in a designated aseptic area.
3. Adequate protective disposable gloves, goggles, gown and mask should be worn.
4. Precautions should be taken to avoid the medicinal product accidentally coming into contact with the eyes. In the event of contact with the eyes, irrigate with large amounts of water and/or 0.9% sodium chloride solution. Then seek medical evaluation by a physician.
5. In case of skin contact, thoroughly wash the affected area with soap and water or sodium bicarbonate solution. However, do not abrade the skin by using a scrub brush. Always wash hands after removing gloves.
6. Spillage or leakage should be treated with dilute sodium hypochlorite (1% available chlorine) solution, preferably by soaking, and then water. All cleaning materials should be disposed of as detailed below.
7. Pregnant staff should not handle the cytotoxic preparation.
8. Adequate care and precautions should be taken in the disposal of items (syringes, needles etc) used to reconstitute and/or dilute cytotoxic medicinal products. Any unused product or waste material should be disposed of in accordance with local requirements.

Storage

Product as package for sale: Store in a refrigerator (2°C – 8°C). Do not freeze.
Keep vial in the outer carton in order to protect from light

Shelf life after first opening the container*:*
The vials are for single use only and any unused portion must be discarded after use. From a microbiological point of view, the product should be used immediately after the first penetration of the rubber stopper. If not used immediately, in use storage times and conditions are the responsibility of the user.

Shelf life after dilution of the solution for injection:
The product may be further diluted, under aseptic conditions, in Glucose 5% or Sodium Chloride 0.9% and administered as an intravenous infusion. 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 not normally be longer than 24 hours at 2-8 °C, unless dilution has taken place in controlled and validated aseptic conditions.

Disposal

Medicines should not be disposed of via wastewater or household waste. All material used for preparation, administration or otherwise coming into contact with Epirubicin should undergo disposal according to local guidelines for the handling of cytotoxic compounds.

Please refer to the Summary of Product Characteristics (SPC) for further information about Epirubicin Hydrochloride Injection 2 mg/ml solution for injection or infusion.