

## Epirubicin Kabi 2 mg/ml Trusted Generics: Total Care



Epirubicin Kabi 2 mg/ml  
solution for injection



**FRESENIUS  
KABI**

caring for life

# Epirubicin Kabi

## Therapeutic class

Cytotoxic antibiotic – anthracycline

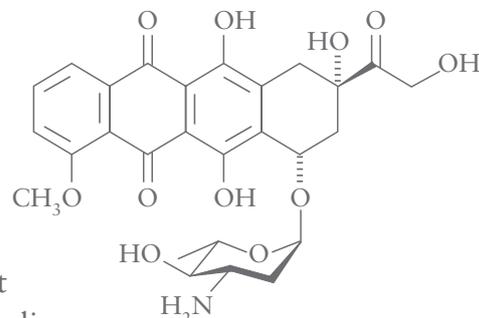
## Indications

Epirubicin Kabi is used in the treatment of a range of neoplastic conditions including:

- Carcinoma of breast
- Gastric cancer

When administered intravesically, epirubicin has been shown to be beneficial in the treatment of papillary transitional cell carcinoma of the bladder, carcinoma-in-situ of the bladder, intravesical prophylaxis of recurrences of superficial bladder carcinoma following transurethral resection.

Please refer to the Epirubicin Kabi SPC for full details.



*The colour of the packaging is designed to improve patient and user safety and to distinguish between different products in our range.*

### Epirubicin Kabi is available as follows:

	50 mg	25 ml	Vial
	200 mg	100 ml	Vial
<b>Composition</b>	1 ml solution contains Epirubicin 2 mg		
<b>Pharmaceutical form</b>	Solution for Injection or Infusion, red, sterile, preservative-free, aqueous solution		
<b>Excipients</b>	Hydrochloric acid, sodium chloride, water for injection		
<b>Shelf life</b>	2 years (before opening the vial)		



### Epirubicin Kabi in focus

Epirubicin has produced responses in a wide range of neoplastic conditions, including breast, ovarian, gastric, lung and colorectal carcinomas, malignant lymphomas, leukaemias and multiple myeloma.

Epirubicin has also been successfully used intravesically as a prophylactic agent after transurethral resection of superficial tumours in order to prevent recurrences.

### Manufacturing and safety

Our state of the art cleaning process for finished vials guarantees the removal of all external contamination.

Fresenius Kabi sleeved vials (OncoShield®) offers maximum protection for people working with cytotoxic drugs.

### Stability

The unopened vials of Epirubicin Kabi injection are stable until the date indicated on the package when stored under recommended storage conditions in the original package.

### Compatibility

Epirubicin Kabi is compatible with polyethylene syringes and commonly used infusion containers.

OncoShield®



#### Abridged SPC of Epirubicin Kabi 2 mg/ml Solution for Injection (epirubicin)

**Composition:** Each vial contains 2 mg/ml Epirubicin Hydrochloride. 25 ml vial contain 50 mg of Epirubicin Hydrochloride. 100 ml vial contain 200 mg of Epirubicin Hydrochloride. **Excipient:** 1 ml of solution for injection or infusion contains 3.5 mg sodium. 1 vial of 25 ml solution contains 88.5 mg sodium. 1 vial of 100 ml solution contains 354.1 mg sodium. **Therapeutic indications:** Epirubicin is used in the treatment of a range of neoplastic conditions including carcinoma of the breast and gastric cancer. When administered intravesically, epirubicin has been shown to be beneficial in the treatment of papillary transitional cell carcinoma of the bladder, carcinoma-in-situ of the bladder, intravesical prophylaxis of recurrences of superficial bladder carcinoma following transurethral resection. **Posology and method of administration:** Epirubicin Kabi is for intravenous and intravesical use only. Epirubicin is not active when given orally and must not be injected intramuscularly or intrathecally. The safety and efficacy of epirubicin in children has not been established. **Intravenous administration:** It is advisable to give the drug via the tubing of a freely running I.V. saline infusion after checking that the needle is well placed in the vein. This method minimises the risk of drug extravasation and makes sure that the vein is flushed with saline after the administration of the drug. Extravasation of Epirubicin from the vein during injection may give rise to severe tissue lesions, even necrosis. In case of extravasation, administration should be stopped immediately. Venous sclerosis may result from injection into small vessels or repeated injections into the same vein. **Conventional doses:** When Epirubicin is used as a single agent, the recommended dosage in adults is 60 mg/m<sup>2</sup> to 90 mg/m<sup>2</sup> body area; the drug should be injected I.V. over 3 minutes to 5 minutes and, depending on the patients' haematomedullary status, the dose should be repeated at 21 day intervals. If signs of toxicity, including severe neutropenia/neutropenic fever and thrombocytopenia occur (which could persist at day 21), dose modification or postponement of the subsequent dose may be required. **High doses:** Epirubicin as monotherapy for the treatment of breast carcinoma with a high dose should be administered according to the following regimens: For high dose treatment, epirubicin may be given as an intravenous bolus over 3-5 minutes or as an infusion of up to 30 minutes duration. **Breast cancer:** In the adjuvant treatment of early breast cancer patients with positive lymph nodes, intravenous doses of epirubicin ranging from 100 mg/m<sup>2</sup> (as a single dose on day 1) to 120 mg/m<sup>2</sup> (in two divided doses on days 1 and 8) every 3 weeks to 4 weeks, in combination with intravenous cyclophosphamide and 5-fluorouracil and oral tamoxifen, are recommended. The drug should be given as an I.V. bolus over 3 minutes to 5 minutes or as an infusion up to 30 minutes. Lower doses (60 mg/m<sup>2</sup> to 75 mg/m<sup>2</sup> for conventional treatment and 105 mg/m<sup>2</sup> to 120 mg/m<sup>2</sup> for high dose schedules) are recommended for patients whose bone marrow function has already been impaired by previous chemotherapy or radiotherapy, by age, or neoplastic bone-marrow infiltration. The total dose per cycle may be divided over 2 to 3 successive days. **Combination therapy:** If epirubicin is used in combination with other cytotoxic products, the dose should be reduced accordingly. Commonly used doses are shown in the table above. **Special patient group: Elderly patients:** It is recommended to reduce the dose in elderly patients. **Impaired liver function:** The major route of elimination of Epirubicin is the hepatobiliary system. In patients with impaired liver function the dose should be reduced based on serum bilirubin levels. **Impaired renal function:** Moderate renal impairment does not appear to require a dose reduction in view of the limited amount of Epirubicin excreted by this route. However, dosage adjustment may be necessary in patients with serum creatinine >5 mg/dL. **Intravesical administration:** Epirubicin may be given by intravesical administration for the treatment of superficial bladder cancer and carcinoma-in-situ. It should not be used in this way for the treatment of invasive tumours which have penetrated the bladder wall where systemic therapy or surgery is more appropriate. Epirubicin has also been successfully used intravesically as a prophylactic agent after transurethral resection of superficial tumours in order to prevent recurrences. For the treatment of superficial bladder cancer the following regimen is recommended, using the dilution table below: 8 weekly instillations of 50 mg/50 ml (diluted with saline or distilled sterile water). If local toxicity is observed: A dose reduction to 30 mg/50 ml is advised. **Carcinoma-in-situ:** Up to 80 mg/50 ml (depending on individual tolerability of the patient). For prophylaxis: 4 times weekly administrations of 50 mg/50 ml followed by 11 monthly instillations at the same dose. The solution should be retained intravesically for 1-2 hours. To avoid undue dilution with urine, the patient should be instructed not to drink any fluid within 12 hours prior to instillation. During the instillation, the patient should be rotated occasionally and should be instructed to void at the end of the instillation time. **Instructions for administration: Intravenous administration:** Epirubicin should be administered into the tubing of a freely flowing intravenous infusion (0.9% sodium chloride or 5% glucose). If an infusion solution is to be prepared, this should be performed by trained personnel under aseptic conditions. Preparation of an infusion solution should be performed in a designated aseptic area. People working with Epirubicin Kabi 2 mg/ml Solution for Injection are required to wear protective gloves, safety goggles and a mask. Epirubicin Kabi 2 mg/ml Solution for Injection contains no preservatives and is therefore only suitable for single use. After use the unused remainder should be destroyed according to the regulations for cytostatic agents. Inactivation of spilled or leaked medicinal product can be obtained with a 1% sodium hypochlorite solution or simply with a phosphate buffering agent (pH >8) until the solution is decolourised. All cleaning materials are disposed of as mentioned under "Disposal". Pregnant women must avoid contact with cytostatic agents. Excreta and vomit should be cleaned up with care. A damaged vial must be treated with the same precautions and must be considered as contaminated waste. Contaminated waste must be stored in appropriate specially marked waste containers. **Disposal:** Any unused product, all materials used in the preparation and administration, or which have come in contact with epirubicin in any way, must be destroyed in accordance with local requirements. **Contraindications:** Epirubicin Kabi is contraindicated in: hypersensitivity to epirubicin, other anthracyclines/ anthracenediones or to any of the excipients, marked myelosuppression induced by previous treatment with either other antineoplastic agents or radiotherapy, patients treated with maximal cumulative doses of other anthracyclines such as doxorubicin or daunorubicin, current or previous history of cardiac impairment (including New York Heart Association (NYHA) class IV heart failure, acute myocardial infarction and previous infarction with residual NYHA class III or class IV heart failure, acute inflammatory heart diseases, arrhythmia with serious haemodynamic consequences), acute systemic infections, severe hepatic impairment, severe mucositis of the mouth, pharynx, oesophagus, and gastrointestinal tract and patient who are breast-feeding. For intravesical administration, epirubicin is contraindicated in urinary tract infections, invasive tumours penetrating the bladder, catheterisation problems, vesical inflammation, large volume of residual urine and contracted bladder. **Pregnancy and lactation:** Fertility: Epirubicin can have genotoxic effects. Therefore, male patients treated with epirubicin are advised not to father a child during and up to 6 months after treatment and to seek advice on conservation of sperm prior to treatment because of the possibility of infertility due to therapy with epirubicin. Women should not become pregnant during treatment with epirubicin. Men and women should use an effective method of contraception during treatment and for six months thereafter. **Pregnancy:** Epirubicin is a potential teratogen and if administered to pregnant women may cause miscarriage, embryotoxicity and foetal death. During pregnancy, particularly the first trimester, cytostatic drugs should only be used on strict indication and when the potential benefits to the mother have been weighed against possible risks of adverse effects on reproduction. Women of childbearing potential should be fully informed of the potential hazard to the foetus should they become pregnant during epirubicin therapy, and use effective contraception during treatment with epirubicin. **Breast-feeding:** It is unknown whether epirubicin is excreted in human breast milk. A risk to the breastfeeding infant cannot be excluded. Breast-feeding should be discontinued during treatment with epirubicin. **Undesirable effects:** Apart from myelosuppression and cardiotoxicity, the following adverse reactions have been described: Alopecia, normally reversible, appears in 60% to 90% of treated cases; it is accompanied by lack of beard growth in males. Mucositis may appear 5 days to 10 days after the start of treatment, and usually involves stomatitis with areas of painful erosions, mainly along the side of the tongue and the sublingual mucosa. Gastro-intestinal disturbances, such as nausea, vomiting and diarrhoea. Hyperpyrexia. Fever, chills and urticaria have been rarely reported; anaphylaxis may occur. High doses of Epirubicin Hydrochloride have been safely administered in a large number of untreated patients having various solid tumours and has caused adverse events which are no different from those seen at conventional doses with the exception of reversible severe neutropenia (< 500 neutrophils/mm<sup>3</sup> for < 7 days) which occurred in the majority of patients. Only a few patients required hospitalisation and supportive therapy for severe infectious complications at high doses. During intravesical administration, as drug absorption is minimal, systemic side effects are rare; more frequently chemical cystitis, sometimes haemorrhagic, has been observed. **Haematological:** The occurrence of secondary acute myeloid leukaemia with or without a pre-leukaemic phase has been reported rarely in patients concurrently treated with epirubicin in association with DNA - damaging antineoplastic agents. Such cases could have a short (1 year to 3 years) latency period. **Overdose:** After the administration of a very high single dose of epirubicin may be expected to cause acute myocardial degeneration within 24 hours and severe myelosuppression within 10 days to 14 days. Treatment should aim to support the patient during this period and should utilise such measures as blood transfusion and reverse barrier nursing. Delayed cardiac failure has been seen with the anthracyclines up to 6 months after the overdose. Patients should be observed carefully and should, if signs of cardiac failure arise, be treated along conventional lines. Epirubicin is not dialyzable. **List of excipients:** Hydrochloric acid, sodium chloride and water for injections. **Shelf life:** Unopened container: 18 months. After first opening of 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 first penetration of the rubber stopper. If not used immediately, in use storage times and conditions are the responsibility of the user. **Special precautions for storage:** Store in a refrigerator (2°C to 8°C). Do not freeze. Keep vial in the outer carton in order to protect from light.

Registered product information may differ in your country. Before prescribing refer to nationally approved Prescribing Information. Before prescribing please refer to nationally registered and approved Summary of Product Characteristics.