



## Epirubicin and cyclophosphamide

This leaflet is offered as a guide to you and your family. The possible benefits of treatment vary; for some people chemotherapy may reduce the risk of the cancer coming back, for others it may control the cancer and its symptoms. Chemotherapy is the most commonly prescribed anti-cancer treatment but other types of treatment are also used. Your doctor will explain to you whether you will receive chemotherapy or another type of treatment, or a combination of both. Your doctor or nurse will be happy to answer any questions you have about your treatment. You will find it useful to refer to the booklet *Chemotherapy, a guide* which gives general information on chemotherapy and side effects.

### Your treatment

Your doctor or nurse clinician has prescribed for you a treatment which includes the chemotherapy epirubicin (red in colour) and cyclophosphamide.

Each drug is given into the vein (intravenously) through a fine tube (cannula) as bolus injections, via a fast flowing drip (infusion) over approximately 30 minutes.

This treatment is repeated every 3 weeks for a total of .... cycles.

You will have a routine blood test before the start of each cycle of treatment.

Occasionally we may not be able to go ahead with your treatment until your blood counts are back to a safe level. If this happens, your chemotherapy may be put back (deferred) a week.

Immediate effects: Cyclophosphamide can cause a feeling of giddiness or dizziness, a metallic taste in the mouth, a feeling of numbness or pressure in the sinuses and a cold sensation along the course of the vein. This can last for an hour or so following treatment. Please tell your nurse if this happens.

This treatment can have serious or possibly life-threatening side effects. It is very important that you report side effects straight away. Don't delay, if you feel unwell, please ring The Christie Hotline on 0161 446 3658. The lines are open 24 hours a day.

### Possible side effects

Chemotherapy can cause many different side effects. Some are more likely to occur than others. Everyone is different and not everyone gets all the side effects. Most side effects are usually temporary, but in some rare cases they can be life-threatening. It is important to tell your hospital doctor or nurse about any side effects so they can be monitored and, where possible, treated.

## **Common side effects (less than 1 in 10)**

- **Increased risk of serious infection**

You are vulnerable to infection while you are having chemotherapy. Minor infections can become life-threatening in a matter of hours if left untreated. Symptoms of infection include fever, shivering, sweats, sore throat, diarrhoea, discomfort when you pass urine, cough or breathlessness. We recommend that you use a digital thermometer so you can check your temperature. You can buy one from your local chemist.

**If you feel unwell, you have symptoms of an infection or your temperature is 37.5°C or above or below 36°C contact The Christie Hotline straight away.**

- **Pain along the vein**

It is common to experience pain or aching along the course of the vein. The vein may feel tight or hard to the touch. Sometimes you can see vein 'indentation' along the arm. If there is any redness, soreness or swelling please contact The Christie Hotline number for advice.

- **Heartburn**

Chemotherapy treatment can cause indigestion or reflux. If you experience this please contact The Christie Hotline. Heartburn can be treated with medication from your GP.

- **Urine discolouration**

Due to its red colour, epirubicin may discolour your urine red or pink for up to 24 to 48 hours following treatment.

- **Loss of periods**

Due to the effect of chemotherapy on the ovaries, you may find that your periods become irregular or stop. This is more likely in women over the age of 40 when most women will notice some change in their periods. It is less common in women under the age of 40 but does still happen and can result in significant menopausal symptoms (see section below). Even if your periods stop completely during chemotherapy your periods may come back several years later. This means that you may be able to become pregnant even many years after chemotherapy. It is very important to use contraception if you don't want to get pregnant.

- **Menopausal symptoms**

When the ovaries stop working due to chemotherapy or during a natural menopause most women experience symptoms such as hot flushes, sweats (night and day) and vaginal dryness. These hormonal changes can make the vagina feel as though it has shrunk and become less easy to stretch. This is called vaginal atrophy and can result in discomfort, pain on sexual intercourse, itching and recurrent urine infections. If your ovaries don't start to work again the vaginal symptoms can be permanent, although the flushes and sweats tend to reduce and stop over a small number of years. Some women who have already gone through menopause may notice their symptoms worsening for a time after chemotherapy.

The vaginal symptoms can start early and the longer they are left the harder they can be to treat. Please contact your specialist nurse either in clinic or by phone when the symptoms first develop if you would like help. Symptoms can be managed in several ways including gels, essential oil pessaries and sometimes local oestrogen replacement. You may also find it helpful to request the booklet 'Menopausal symptoms and breast cancer' by Breast Cancer Care (either from your breast care nurse, the cancer information centre at The Christie or online).



- **Sore mouth**

Your mouth may become sore or dry, or you may notice small mouth ulcers during this treatment. Drinking plenty of fluids and cleaning your teeth regularly and gently with a soft toothbrush can help to reduce the risk of this happening. We can prescribe a mouthwash for you to use during treatment. You can dilute this with water if your mouth is sore. Ask your doctor or nurse for further advice. There is also general mouth care information in the chemotherapy booklet. If you continue to have a sore mouth, please contact The Christie Hotline.

- **Nausea and vomiting (sickness)**

The severity of this varies from person to person. Anti-sickness medication may be given along with your chemotherapy to prevent this. You will also be given anti-sickness tablets to take at home. If you continue to feel or be sick, contact your GP or this hospital, because your anti-sickness medication may need to be changed or increased.

- **Hair loss**

Hair loss is usually total. The hair falls out gradually 10 to 14 days following your first course of treatment. Body and facial hair can also fall out. The time scale varies from person to person. Please remember that this is a temporary side effect and your hair will grow back when your treatment is complete. If you would like an appointment with the wig service, this can be arranged for you by visiting the Cancer Information Centre (department 7). Ask the staff for a copy of the 'Wig Fitting Service'. A selection of headscarves and turbans is available from 'Headstart'.

Cold caps are available to try and reduce the effects of hair loss. Please speak to your doctor or nurse if you would like further information.

- **Lethargy**

Some chemotherapy may make you feel tired and lacking in energy. It can be frustrating when you feel unable to cope with routine tasks. You may benefit from additional support during your treatment. Complementary therapies may be helpful. Speak to your nurse or doctor for further information. If necessary, take time off work. Gentle exercise, such as walking, can be beneficial.

- **Bladder irritation**

Cyclophosphamide may cause a burning sensation or irritation on passing urine because the chemotherapy irritates the bladder wall. To prevent this drink a large glass of water both before and after treatment with cyclophosphamide. Also, try to pass urine as soon as the urge is felt. It is important that you continue to drink plenty of fluids during your chemotherapy, up to 2 litres a day is recommended. If you do have a burning sensation or irritation on passing urine, please contact the hospital straight away.

- **Strange taste**

Chemotherapy can often leave a strange, metallic taste in your mouth. It can also make food seem tasteless and bland. Normal taste will usually come back after the treatment finishes. Ask the staff for dietary booklets which you may find helpful.

- **Skin changes**

Epirubicin can cause a rash which may be itchy. Your doctor can prescribe medication to help with this. Areas which have previously been treated with radiotherapy may become red and sore. Let your doctor know if this happens. The skin over the vein used for the injection may become discoloured. Your skin may darken, due to the excess production of pigment. The darkening usually returns to normal a few months after treatment has finished. Asian and African-Caribbean people may develop noticeable light patches on their skin. Your skin can also be more sensitive to sunlight. You can still go out in the sun but remember to avoid direct sunlight and use a higher factor sunblock cream.

- **Changes to nails**

Your nails may become darker. White lines may appear on the surface of the nail. These changes grow out over a few months once the treatment has finished. Acrylic nails are not recommended.

- **Anaemia (low number of red blood cells)**

While having this treatment you may become anaemic. This may make you feel tired and breathless. Let your doctor or nurse know if these symptoms are a problem. You may need a blood transfusion.

- **Bruising or bleeding**

This treatment can reduce the production of platelets which help the blood clot. Let your doctor know if you have any unexplained bruising or bleeding, such as nosebleeds, bloodspots or rashes on the skin, and bleeding gums. You may need a platelet transfusion.

### **Uncommon side effects (less than 1 in 10)**



**Chest pain and palpitations.** Epirubicin can affect the heart muscle.  
**Go straight to A&E if you have chest pain during or in between treatments.**



- **Cardiotoxicity (damage to the heart)**

Rarely epirubicin can cause damage to the heart leading to heart failure. This can sometimes occur some months after the treatment has finished. The function of your heart may be checked with an echocardiogram/MUGA scan before you start treatment and the dose of epirubicin you receive is carefully monitored.



- **Blood clots**

During chemotherapy you are more at risk of blood clots in the legs (DVT) or lungs (PE). Occasionally these clots can be life-threatening. To help prevent clots, keep mobile and drink plenty of non-alcoholic fluids.



- **Diarrhoea**

If this becomes a problem while you are having treatment, contact The Christie Hotline for advice. **If you develop severe diarrhoea it is important to contact this hospital straightaway as this may be a sign of a serious infection. Don't delay!**

- **Constipation**

Chemotherapy can also make you become constipated. Try to drink plenty of fluids and eat foods high in fibre. Tell your doctor who may prescribe a suitable laxative. Ask the staff for a copy of 'Eating: Help Yourself' which has useful ideas about diet when you are having treatment.

### **Rare side effects (less than 1 in 100)**

- **Extravasation** is when chemotherapy leaks outside the vein. If you develop redness, soreness or pain at the injection site **at any time** please let us know straight away.

### **Serious and potentially life threatening side effects**

In a small proportion of patients chemotherapy can result in very severe side effects which may rarely result in death. The team caring for you will discuss the risk of these side effects with you.

## **Sex, contraception & fertility**

### **Protecting your partner and contraception:**

We recommend that you or your partner use a condom during sexual intercourse while you are having the course of chemotherapy. Chemotherapy is dangerous to unborn babies and you should not try to become pregnant whilst you are having chemotherapy. Using a condom will also protect your partner from any chemotherapy drugs that may be present in the semen or vagina.

If you suspect that you may be pregnant please tell your doctor immediately.

**Fertility:** This chemotherapy may affect your ability to have children. Your doctor or nurse should have discussed this with you. If not, please ask them before you start treatment.

## Late side effects

Some side effects may become evident only after a number of years. In reaching any decision with you about treatment, the potential benefit you receive from treatment will be weighed against the risks of serious long term side effects to the heart, lungs, kidneys and bone marrow. With some drugs there is also a small but definite risk of developing another cancer. If any of these problems specifically applies to you, the doctor will discuss these with you and note this on your consent form.

## Contacts

If you have any general questions or concerns about your treatment, please ring the area where you are having treatment:

- Administration enquiries 0161 918 7606/7653
- Chemotherapy nurse: 0161 918 7171
- Clinical trials unit 0161 918 7663
- Breast care nurses 0161 446 3996

For urgent advice ring The Christie Hotline on 0161 446 3658 (24 hours)

Your consultant is: .....

Your hospital number is: .....

Your key worker is: .....



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Details of the sources used are available, please contact [Patient.Information@christie.nhs.uk](mailto:Patient.Information@christie.nhs.uk)