

## BEACOPP-14 for Hodgkin lymphoma

The possible benefits of this treatment for Hodgkin lymphoma vary; for some people this chemotherapy may reduce the risk of the cancer coming back, for others it may control the cancer and its symptoms. 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 with doxorubicin, cyclophosphamide, etoposide, procarbazine, bleomycin, vincristine and prednisolone. The treatment is given as an injection (bolus), as an infusion (drip) into your vein and tablets every 2 weeks for 4 or 6 cycles. The treatment consists of the following:

<b>Day 1</b>	Doxorubicin Cyclophosphamide Etoposide Procarbazine Prednisolone	by injection by injection by short infusion capsule every day for 7 days tablets every day for 7 days
<b>Days 2+3</b>	Etoposide Procarbazine Prednisolone	by short infusion capsule tablets
<b>Days 4 - 7</b>	Procarbazine Prednisolone	capsule tablets
<b>Day 8</b>	Bleomycin Vincristine	by short infusion by short infusion
<b>Day 9 - 14</b>	Filgrastim GCSF	by injection

You will have a routine blood test and medical review before day 1 and day 8 treatments. This is so your team can monitor and manage any side effects as well as assess your response to treatment.

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.



- Take your **prednisolone** tablets with breakfast in the morning, not on an empty stomach as they may cause indigestion. It is also better to take them earlier in the day since they can make you feel more alert and prevent sleep.
- You must not drink alcohol or eat certain foods (see the medicine information leaflet with capsules) while you are having the **procarbazine** capsules and for 48 hours after finishing them. These capsules can cause a reaction which may make you vomit, experience headaches, dizziness or drowsiness.
- As you have Hodgkin lymphoma, if you need a blood or platelet transfusion, the blood transfusion laboratory will select 'irradiated' blood. This is to reduce the risk of a serious reaction. We will give you more information about this.

## 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 (more 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 pharmacy.

**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.**

### • 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, or bleeding gums. You may need a platelet transfusion.

### • Lung function (Warning!)

Bleomycin may cause some changes to your lung tissue. Report any cough or breathlessness to your doctor without delay.

### • Flu-like symptoms (Warning!)

Bleomycin may cause flu-like symptoms such as fever, aches and pains and shivering about 3 to 5 hours after it is given. These symptoms are temporary and should go within 12 to 24 hours. Paracetamol will help. **If your symptoms persist or are particularly severe, please contact The Christie Hotline on 0161 446 3658 as these symptoms can also be a sign of infection or sepsis.** Inform them when you had the chemotherapy and they will provide you with the appropriate advice.

- **Changes to bowel habits**

Vincristine as well as some anti-sickness tablets can cause constipation. Try to drink plenty of fluids and eat foods high in fibre. Report this to your hospital doctor who may prescribe a suitable laxative. Ask the staff for a copy of The Christie booklet 'Eating: help yourself' which has useful ideas about diet when you are having treatment.

This treatment can also cause diarrhoea. Report this to your hospital doctor who may prescribe suitable medication once an infection has been ruled out. You may be asked to provide a stool sample.

- **Mood changes**

Prednisolone tablets can affect your mood. This may result in mood swings and irritability. You may also have difficulty in sleeping. You may feel very energetic and have a good appetite when you take the tablets, and then lethargic and low in mood when you stop. If you experience this side effect and find it hard to tolerate, you should discuss it with your doctor.

- **Nausea and vomiting (sickness)**

The severity of this varies from person to person. Anti-sickness medication will 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 but this depends on the number of cycles of chemotherapy you have. The hair falls out gradually 10 to 14 days following your first course of treatment. 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 completed. Very rarely, hair loss may be permanent.

The cancer information centre offers a coping with hair loss service to all patients where support, information and advice will be given. Drop in, contact **0161 446 8100** or email [informationcentre@christie.nhs.uk](mailto:informationcentre@christie.nhs.uk). Information about the wig service can also be found here and vouchers for wigs can also be obtained for eligible patients. The wig room provides a drop in service, please see The Christie leaflet 'The wig fitting service' for further information.

The Maggie's Centre runs a Talking Heads hair loss support workshop for anyone who is experiencing hair loss (both men and women). These sessions cover the practicalities of hair loss as well as offering support with its emotional impact. Contact Maggie's on **0161 446 4848** or email [manchester@maggiescentres.org](mailto:manchester@maggiescentres.org).

- **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. If you do feel tired, take rest and get help with household chores. If necessary, take time off work. Gentle exercise such as walking can be beneficial.

- **Skin and nails**

This treatment can sometimes cause a rash, skin sensitivity and/or blistering to the hands and feet. Report this to your doctor if this happens. Sometimes as a result of the chemotherapy, your skin may appear darker in colour or lightly tanned, especially around the joints. This is known as hyper-pigmentation. Asian and African-Caribbean people may develop noticeable light patches on their skin. Your nails may also discolour or become brittle during treatment. The skin and nails will usually return to normal when treatment is finished.

### • Irritation of the bladder

Cyclophosphamide may cause a burning sensation or irritation on passing urine because the medicine irritates the bladder wall. When you have cyclophosphamide, try to drink plenty of fluids throughout the day and for 72 hours afterwards. Also, try to pass urine as soon as the urge is felt. Tell your doctor or nurse as soon as possible if you have this side effect.

### • Tingling and numbness in the fingers or toes/muscle weakness

This is common but is usually only mild and temporary. It can sometimes last for some time or become permanent. Sometimes you may also have difficulty controlling the muscles in your arms and legs or your balance. Please report these symptoms to your doctor on your next hospital visit.

### • Eye irritation

We will give you eye drops to try to prevent this, but please let your doctor or nurse know if your eyes feel uncomfortable.

### • Urine discolouration

Doxorubicin because of its red colour, may discolour your urine red or pink for up to 24 hours following treatment. This is perfectly normal and nothing to worry about.

## Uncommon side effects

### • Blood sugar

Prednisolone may cause your blood sugar to rise. If you are diabetic then you may need to increase the dose of any diabetic medication you take (insulin or tablets). You should discuss this with your doctor before starting the chemotherapy. Prednisolone can also induce diabetes in people not known to have this disease. This is normally reversible although you may need to take some diabetic medication while you are having chemotherapy.

### • Sore mouth and altered taste

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. You may also develop a strange taste sometimes described as metallic or bitter. A strongly flavoured sweet or mint will help to disguise this. Normal taste will usually return after the treatment finishes.

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

### • Extravasation

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.

Chemotherapy may cause changes in the muscle of the heart. This can affect how the heart works. The effect on the heart depends on the dose given. It is very unusual for the heart to be affected if you have standard doses. Tests to see how well your heart is working may sometimes be carried out before the chemotherapy is given.

## Sex, contraception and 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 this will also protect you and your partner from any chemotherapy drugs that may be present in semen and in the 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:

Haematology day unit - **0161 446 3924**

Lymphoma clinical nurse specialists - **0161 446 8573**

Lymphoma secretaries -

**0161 446 3753** - Professor Radford/Dr Linton

**0161 446 8574** - Professor Illidge

**0161 446 3956** - Dr Smith

**0161 446 3332** - Professor Cowan

**0161 446 3302** - Dr Harris/Dr Chan

**0161 446 3869** - Dr Bloor

Palatine treatment ward - **0161 446 3960/3961**

General enquiries - **0161 446 3000**

Your consultant is: .....

Your hospital number is: .....

Your key worker is: .....

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If you need information in a different format, such as easy read, large print, BSL, braille, email, SMS text or other communication support, please tell your ward or clinic nurse.

The Christie is committed to producing high quality, evidence based information for patients. Our patient information adheres to the principles and quality statements of the Information Standard. If you would like to have details about the sources used please contact **patient.information@christie.nhs.uk**

For information and advice visit the cancer information centres at Withington, Oldham or Salford. Opening times can vary, please check before making a special journey.



Contact The Christie Hotline for  
urgent support and specialist advice  
**The Christie Hotline: 0161 446 3658**  
Open 24 hours a day, 7 days a week