



R-GCVP

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 course of treatment with rituximab, gemcitabine, cyclophosphamide, vincristine and prednisolone (steroid). The treatment is given as infusions (drip) into your vein and as tablets. The treatment consists of the following:

Day 1	Vincristine by short infusion Cyclophosphamide by injection Gemcitabine by infusion over 30 minutes Rituximab by infusion over 60 minutes to a few hours
Day 1 to 5	Prednisolone tablets
Day 8	Gemcitabine by infusion over 30 minutes

The cycle of chemotherapy is repeated every 3 weeks for up to 6 cycles.

You will have a routine blood test and medical review before the start of each cycle of treatment. This is so your team can monitor and manage any side effects as well as assess your response to treatment.

- Before you have your treatment with **rituximab**, we will give you 2 paracetamol tablets and intravenous (into a vein) injections of an anti-histamine and hydrocortisone. These can help to prevent any immediate allergic reactions.
- 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.
- **If you are taking any other medicines**

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.

Tumour Lysis Syndrome

This treatment may cause the rapid breakdown of lymphoma cells, which may lead to abnormalities in the blood. This problem is more likely if you have a lot of disease or if your kidneys do not work as well as they should do. Your doctor will tell you if you are at risk. You may be given a kidney-protective medicine called allopurinol for the first cycle of treatment, and your doctor may do additional blood tests to monitor this side effect. We sometimes admit patients for the first treatment to give intravenous fluids and kidney-protective medication and twice daily monitoring of blood tests for 48 hours.

Common side effects (more than 1 in 10)

Increased risk of serious infection

You are vulnerable to infection while you are having chemotherapy as this treatment can cause low white blood cells and/or low antibody levels. 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 nose bleeds, bloodspots or rashes on the skin, or bleeding gums. You may need a platelet transfusion.



- **Infusion related reactions**

The side effects of rituximab commonly occur while you are having the infusion and include chills, fever and shivering. If you have any of these side effects please tell your nurse straightaway, however, your progress will be monitored regularly. Rarely, you may also develop a skin rash, headache, tumour pain, sore throat or sickness. If this happens or you notice any swelling around the eyes and face, feel dizzy or faint, or have any shortness of breath during the chemotherapy, please tell the nurse or doctor immediately. This may be an allergic reaction and they may need to slow down or stop the drip.

You may feel tired and have a headache, these symptoms are related to your treatment and usually go when the infusion has finished.

If you do not have any reactions to your first treatment, we may be able to give you subsequent infusions over a shorter period of time.

- **Lethargy**

Chemotherapy often makes 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.

- **Hair thinning**

Some hair loss may occur during treatment. It is advisable to avoid perms, colours, use of hot brushes and vigorous, frequent washing that could increase hair loss. Please remember that this is a temporary side effect and your hair will grow back when your treatment is completed. If you would like an appointment with the wig service, this can be arranged for you. Ask the staff for a copy of 'The Wig Fitting Service.'

- **Skin and nails**

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 hyperpigmentation. 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.

- **Constipation**

Vincristine and some anti-sickness tablets can cause constipation. Try to drink plenty of fluids and eat foods high in fibre. Report this to your Christie 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.

Uncommon side effects (less than 1 in 10)

- **Flu-like symptoms and headache**

Gemcitabine 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 are particularly severe, tell your doctor on your next visit.

- **Tingling & 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.

- **Skin rash**

You may develop a skin rash. This is usually mild and easily treated. Please tell your doctor on your next visit. Sometimes blisters develop on your skin. Inform your doctor if this occurs.

- **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.

- **Bladder irritation**

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.

- **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.

- **Blood sugar**

Prednisolone can 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**

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.

Rare side effects (less than 1 in 100)



- **Breathlessness**

Very rarely gemcitabine can cause inflammation of your lungs. This can make you breathless. Tell your doctor if you develop this problem while you are having this chemotherapy.

- **Fluid retention/swelling**

Your hands, face and feet/legs may become swollen on this chemotherapy. This is usually mild and temporary, no specific treatment is needed. Keeping your feet and legs raised may help. Tell your doctor if the swelling is severe.

- **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 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. If any of these problems specifically applies to you, the doctor will discuss these with you and note this on your consent form.

With some drugs such as cyclophosphamide there is also a small but definite risk of an increased chance of developing another cancer.

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 specialist 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
0161 446 3869 Dr Bloor
- Palatine Treatment Ward 0161 446 3960/396 or 3925
- General enquiries 0161 446 3000

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

Your consultant is:

Your hospital number is:

Your key worker is:



The Christie Patient Information Service July 2014
CHR/CT/615/28.05.08 Version 4 Review date: July 2017

Details of the sources used are available, please contact Patient.Information@christie.nhs.uk