High dose cytarabine (Lymphoma)

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 called High dose cytarabine which is a chemotherapy drug. It is also known as Ara-C.

You will be admitted to hospital for 2-3 days for this treatment. It may be given with other chemotherapy drugs on the same visit or in alternating cycles. Your doctor will advise you about which treatment you will have.

Cytarabine (Ara-C) given via an infusion (drip) over 1 to 3 hours. You will receive a total of 4 doses which takes 2 days to give. Each cycle lasts 21 days. You will have up to 4 cycles.

- If you are taking any other medicines: It is important to tell the doctor if you are taking medicine for any other condition. Some medicines can react with your treatment. So always tell your doctor at every visit about any other medicines or tablets you are taking.

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.

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.
**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)**

- **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.

- **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.

  You will have a routine blood test every day while you are in hospital to monitor the effects of the chemotherapy, but please tell your nurse if you experience any of the symptoms listed above.

- **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. If you continue to feel or be sick, tell your nurse because your anti-sickness medication may need to be changed or increased.

- **Diarrhoea**
  If this becomes a problem during or after your treatment, anti-diarrhoea tablets can be prescribed by your doctor. Ask the staff for a copy of *Eating: Help Yourself* which has some useful ideas about diet when you are having treatment.

- **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.

Occasionally during treatment you may experience a strange taste, sometimes described as metallic or bitter. A strongly flavoured sweet or mint will help to disguise this.

- **Hair loss**
  Hair loss is usually total. 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. 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’.

- **Changes to kidney function**
  Cytarabine can cause changes to your kidney function. Your kidney function will be monitored with your routine blood tests. Drink plenty of fluids to prevent dehydration. Contact your doctor or nurse if you notice any changes to the frequency you pass urine or if you notice any blood in your urine.

- **Eye irritation**
  This is a known side effect of the cytarabine at the dose given in this treatment. We will give you eye drops to try to prevent this, but please let your nurse or doctor know if your eyes feel uncomfortable.

- **Lethargy/flu-like symptoms/fever**
  Cytarabine may make you feel tired and lacking in energy. It can also cause aching muscles and bones and occasionally high temperatures. It can be frustrating when you feel unable to cope with routine tasks. If you do feel tired, take rest when necessary. Gentle exercise such as walking can be beneficial.

- **Skin reddening/rash**
  Your skin may become reddened, itchy or you may develop a rash. Let your doctor or nurse know if you experience any of these symptoms.

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

- **Nervous system changes**
  This treatment can cause a reduced level of consciousness, drowsiness or slurred speech. Contact The Christie Hotline without delay if you experience any of these symptoms.

- **Cytarabine** can sometimes cause a syndrome that can result in some or all of the following: fever, weakness and aching in your muscles and bones, a rash and pain in the chest. This will not affect everyone and will disappear soon after the cytarabine infusions stop.
• Liver disorders
The chemotherapy may cause changes in the way your liver works. Your medical team will monitor this closely by taking blood samples at each visit to measure your liver function. If your liver is affected, we may need to alter the dose of chemotherapy.

• Bowel inflammation (colitis)
The treatment can cause inflammation or ulcers in your bowel which may be painful and can lead to serious infection of the bowel and potentially the lining on the inside of your abdomen (peritonitis). If you notice any blood when passing stools or you develop pain in your abdomen (tummy) please let the doctor or nurse know.

Rare side effects (less than 1 in 100)

• Skin changes
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. The skin will return to normal when treatment is finished. Some chemotherapy can make your skin more sensitive to the sun than usual. Sit in the shade, avoid too much sun and use a sunblock cream. Asian and African-Caribbean people may develop noticeable light patches on their skin.

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. 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 specialist 0161 446 8573
- Lymphoma secretaries 0161 446 3753 Professor Radford/Dr Linton
- Lymphoma secretaries 0161 446 8574 Professor Illidge
- Lymphoma secretaries 0161 446 3956 Dr Smith
- Lymphoma secretaries 0161 446 3332 Professor Cowan
- Lymphoma secretaries 0161 446 3302 Dr Harris
- Lymphoma secretaries 0161 446 3869 Dr Bloor
- Palatine Treatment Ward 0161 446 3960/3961 or 3925
- General enquiries 0161 446 3000

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