



# LEAM Conditioning for autologous transplant (inpatient)

## Haematology and Transplant Unit

This leaflet is offered as a guide to you and your family. You may find it useful to refer to the booklet *Chemotherapy: a guide* this gives general information on chemotherapy and side effects. Before you can receive your transplant your existing bone marrow and immune system needs to be prepared to make way for the new cells. This is called conditioning. Your new cells will be scheduled for re-infusion into you the day after the conditioning therapy has finished. Your treatment will be fully explained to you and your family in clinic by your doctor or one of the nurses from the transplant team who will be happy to answer any questions. If you do not already have a central venous catheter you will need one inserting before starting the conditioning regimen. This is organised by one of the team and will usually be performed on the day of your admission.

### Your treatment

Your doctor has prescribed for you a treatment called **LEAM CONDITIONING**. This involves giving the chemotherapy into the vein (via a central venous catheter), and also taking oral tablets.

<b>Day -6</b>	<b>Admission to the Haematology &amp; Transplant unit and central line insertion</b> Commence oral Lomustine
<b>Day -5 to Day -2</b>	Etoposide via a drip over 2 hours Cytarabine via a drip over 30 minutes twice a day
<b>Day -1</b>	Melphalan and IV fluids
<b>Day 0</b>	Harvested stem cells thawed and infused via a drip over 30 minutes
<b>Day +10</b>	Commence GCSF
<b>Day +28</b>	Commence co-trimoxazole tablets Mon/Wed/Fri Commence Aciclovir and Fluconazole tablets until 3 months after transplant

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, inform the nurse looking after you. Once you have been discharged from hospital, 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.**

**Lomustine** is given as an oral tablet on the evening of your admission.

**Etoposide** is given intravenously. It can alter your bowel habit. You may also experience skin changes such as a rash/itching/pigmentation, loss of appetite, a sore mouth, lethargy and hair loss.

**Cytarabine** can sometimes cause symptoms 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. This is given twice a day.

**Melphalan** can make you feel nauseous and cause vomiting. This should improve 24 hours after the infusion has stopped. However, you may still continue to experience some degree of nausea.

### **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)**

- **Anaemia is a low number of red blood cells**

While having this treatment you will become anaemic. This may make you feel tired and breathless. Let the doctor or nurse know if you experience these symptoms. You will have regular blood tests to monitor this. You may need a blood transfusion.

- **Bruising or bleeding**

This treatment can reduce the production of platelets which help the blood clot. Let the doctor or nurse know if you have any unexplained bruising or bleeding, such as nosebleeds, bloodspots or rashes on the skin, and bleeding gums. You will have regular blood tests and daily visual checks by the nurses to monitor this. You may need a platelet transfusion.



- **Nausea and vomiting (sickness)**

The severity of this varies from person to person. Anti-sickness medication will be given to you through your line or as a tablet. If you continue to feel or be sick, let the doctor or nurse know and alternative medications can be prescribed.

- **Upset bowels**

You may experience an altered bowel habit. If you develop diarrhoea you will be asked to provide a sample to check this for any infection. You will need to take extra fluids to stop you becoming dehydrated if you have diarrhoea. The fluids can be given either by drinking or if you are feeling too sick then by an intravenous infusion. We will give you antibiotics if the diarrhoea is proven to be infective in origin. If you have constipation we may give you a laxative. If you experience any of these symptoms it is important to tell your doctor or nurse.

- **Hair loss**

Hair loss is usually total. The hair falls out gradually approximately 10 to 14 days following your chemotherapy. The time scale varies from person to person. This is a temporary side effect and your hair will grow back following your transplant. However the colour and texture may alter. If you would like an appointment with the wig service, this can be arranged for you.

- **Altered taste and smell**

Chemotherapy can alter your taste and smell. Sometimes altered taste can be described as metallic or bitter. Your sense of taste and smell will normally return but can take some time.

- **Mouth care/mucositis**

When you begin your conditioning therapy we will give you some products to use that will help to prevent infections in your mouth. Your mouth may become sore or dry and you may notice mouth ulcers. It is important to maintain good oral hygiene, drinking regular fluids and regular teeth brushing with a soft toothbrush. If you have difficulty with your mouth care let your nurse know. You may develop mucositis. This occurs when the mucous membrane lining of your mouth and throat become inflamed and ulcerated. This can be painful and you may need strong analgesia.

- **Clean diet**

This is a diet that you must follow during your transplant. You will be at risk of infection during your transplant and certain foods carry germs which can be harmful to you. See the booklet 'Welcome to the haematology and transplant unit' for more information. It is usual to experience weight loss during your transplant as your appetite can be reduced. Eating little and often can help. Food supplements are available and a dietician may come to see you.

- **Sexuality**

The effects of chemotherapy and your transplant can cause sexual problems and may affect your fertility. Loss of sexual desire, changes in hormone levels and for women vaginal dryness, painful intercourse and early menopause are possible. Please discuss any of your concerns with one of the team.

Further information is in the booklet – 'Welcome to the Haematology and transplant unit' and The Lymphoma Association 'Autologous Transplant' booklet.

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

- **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. For some treatments it is advised that contraception is used and pregnancy avoided for 6 to 12 months after the last dose of treatment. If you have received one of these treatments the medical team will discuss this with you.

**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 an increased chance 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 contact the Haematology and Transplant Unit.

- Transplant co-ordinator 0161 918 7219
- Haematology and Transplant Unit 0161 446 3925
- General enquiries 0161 446 3000
- For urgent advice ring The Christie Hotline 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