

Pre-operative chemo-radiotherapy to the oesophagus (gullet) Paclitaxel (Taxol) and carboplatin

Chemo-radiotherapy to the oesophagus (gullet)

This information describes your future treatment and answers some commonly asked questions. Please read it carefully and make a note of anything you wish to ask your consultant, pharmacist or radiographer. There are contact telephone numbers at the end of the leaflet. Please ring us if you would like to discuss any aspect of your treatment.

Why do you need further treatment?

You have recently been diagnosed with cancer of the oesophagus (gullet) and referred to The Christie for advice about future treatment. Your consultant has recommended that the best treatment for you is chemotherapy and radiotherapy before a planned operation.

Radiation can be harmful to the unborn child. It is important to let the radiographers know if you have missed a period, or suspect that you may be pregnant before any radiation exposure is given.

How does radiotherapy work?

Our bodies are made up of cells and all cells have the capacity to divide. If radiation hits a cell that is dividing the cell will be damaged. Cancer cells are much less able than normal cells to repair the damage, so more of the cancer cells will be destroyed. Giving chemotherapy at the same time is known to make radiotherapy to stomach cancer more effective, but it does cause more side effects.

What does the treatment involve?

The treatment takes five weeks in total. The *radiotherapy* is given once a day (Monday to Friday) for a total of 25 sessions and takes about 15 minutes a day. It is combined with carboplatin and paclitaxel chemotherapy once a week during the five weeks of treatment. Following completion of treatment your doctor will organise a repeat CT scan and you will be referred back to your surgeon for an operation approximately 6 to 8 weeks later. The following table shows the timetable for treatment:

Week 1	Week 2	Week 3	Week 4	Week 5
Day case intra-venous chemotherapy usually Tuesday				
Radiotherapy on Monday to Friday for 5 weeks				



Before starting treatment you will have to visit the hospital for the following tests:

- blood tests
- in some cases a radioisotope scan to check your kidney function and occasionally heart function
- radiotherapy planning (you will need to make several visits to the radiotherapy department before treatment begins – see below)
- lung function tests (if you already have breathing problems).

Your treatment

Your doctor nurse clinician has prescribed for you a course of treatment, which includes the chemotherapy Paclitaxel (Taxol) and carboplatin. The chemotherapy is given into a vein via a drip. The treatment consists of the following:

- Paclitaxel is given via a drip lasting 1 hour
- Carboplatin is given via a drip lasting ½ hour

The treatment is repeated every week for a total of 5 treatments.

Paclitaxel can rarely cause an allergic reaction. To prevent this happening, we will give you pre-medication injections 30 minutes before starting the Paclitaxel treatment. You will have a routine blood test before the start of each cycle of treatment.

Planning the radiotherapy treatment

Everyone with cancer is different. To ensure that the treatment is designed to your particular needs, you will spend some time preparing for treatment. Planning is usually carried out on a planning CT scanner. While you are on the CT scanner, you will need to remove any clothing covering the area being treated. Permanent ink marks will be made on your skin to show where treatment is to be given. These look just like small dots and are barely noticeable but will ensure that you are always in the correct position for the treatment course. Your doctors will use this scan to target the radiotherapy with reference to other investigations you have already had.

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 on 0161 446 3658.

Blood sugar

You will receive a dose of steroids before each treatment. If you are diabetic, you should monitor your blood sugar levels during your treatment. If your blood sugar levels are affected, you should speak to your doctor about your diabetic medications.

Flu vaccinations

Is it alright for me to have a flu jab during the time I'm having chemotherapy?

It's safe to have a flu jab, but depending on the sort of chemotherapy you have had, it may not give quite as much protection against infection as usual. Some patients may need two vaccinations. However, if you're thinking of having any other vaccinations, do check with your Christie doctor first, because some vaccines should be avoided.

Other 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.



Allergic reactions

A small number of patients can have an allergic reaction to **paclitaxel** and very rarely to **carboplatin**. Reactions can include breathlessness, a feeling of dizziness, skin rashes, itching, a high temperature, shivering, redness of the face, headache, anxiety, and a desire to pass urine. You will be monitored throughout your treatment for any signs of an allergic reaction but it is important to tell your nurse or doctor if you have any of these signs, or feel unwell in any way.

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.

Paclitaxel can cause pain where the injection is given, or along the vein. If you feel pain, tell your doctor or nurse as they can slow the drip to reduce the reaction.

Common side effects (more than 1 in 10)

• Muscle and joint pains

Sometimes you may experience pain in the muscles in your legs. A simple painkiller will help. Ask your doctor for advice on this.

• 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 on **0161 446 3658**.

• Skin

The skin in the treated area might become a little pink or even red. It may itch a little or become dry. You may shower or bathe during your treatment period but be careful about the water temperature. Don't have the water too hot and don't soak the skin for long periods. Use mild baby soap or Simple soap and avoid rubbing the area, especially if the skin is already red or itchy. It is best to pat the area dry with a soft towel. If your skin is very sore, mention it to the radiographers. They may recommend a suitable cream. Men with a hairy chest may find that chest hair can fall out in the treated area – this usually happens 2 to 3 weeks after treatment starts and it will grow back once the treatment is finished.

• Low blood pressure

Your blood pressure will be checked during your treatment. Let the doctor know if you feel faint or dizzy.

• Tiredness

Radiotherapy and chemotherapy can both make you feel tired. This can last for a number of weeks after the treatment is finished. It is best to take it easy and don't push yourself too hard – rest when you feel tired.

- **Nausea and vomiting (sickness)**

Chemotherapy and radiotherapy can both make you feel nauseous, particularly if the lower part of your gullet is being treated with radiotherapy. We will give you anti-sickness drugs to take before and after the chemotherapy and your doctor or nurse clinician can prescribe additional tablets which you can take as needed. Ginger has natural anti-sickness properties and is available in different forms such as biscuits, tea and ginger ale. 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.

- **Swallowing problems**

The lining of the gullet becomes irritated during the treatment. You may feel as if you have a lump in your throat when you swallow. In some cases this can be painful. Your Christie doctor or nurse clinician can prescribe soothing medicines such as liquid paracetamol or sucralfate to help you, so let us know as soon as swallowing becomes difficult. Cool drinks or ice cream and jellies might help and it is advisable not to take hot drinks or eat spicy food. You may need a soft or liquidised diet as a temporary measure. Ask your nurse for a copy of 'Advice about soft and liquidised food'. Occasionally – if you cannot swallow at all – a temporary feeding tube will need to be inserted. At first, you will have to stay in hospital as an inpatient for this and to establish your feeding pattern, but you may be allowed to go home with the feeding tube once you have had training on how to do this.

- **Tinnitus and high frequency hearing loss**

You may develop tinnitus (ringing in the ears). This sensation should subside when your treatment finishes. High frequency hearing loss can also occur with this chemotherapy. This may be permanent.

Uncommon side effects (less than 1 in 10)

- **Kidney function**

Some chemotherapy such as carboplatin can affect your kidneys. It is important to monitor how your kidneys are working while you are having treatment. We do this by a blood test, but a more accurate assessment with a GFR can be arranged if there are concerns about your kidney function. It is important to drink plenty of fluids (at least 8 cups) the day before and for a few days after chemotherapy.

- **Hair loss**

Hair loss is usually minimal. The hair may thin over your 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 can 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**. 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 anticipating or 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 641 4848** or email **manchester@maggiescentres.org**.

- **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.



Diarrhoea

If this becomes a problem while you are having treatment, anti-diarrhoea tablets can be bought from a pharmacy or prescribed by your GP for a temporary period until this is resolved. If the problem persists contact this hospital. **If you develop severe diarrhoea it is important to contact The Christie straight away as this may be a sign of a serious infection. Don't delay!**

- **Constipation**

You may become constipated during this treatment. 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.

- **Changes in heart rate**

Paclitaxel can sometimes cause a temporary slowing of the heart rate known as bradycardia. This usually does not cause any harm.

- **Liver function**

Your liver function may be temporarily affected. Paclitaxel may cause changes in the way that your liver works. Before each treatment your liver function will be reviewed.

- **Abdominal pain**

This may start a few days after finishing chemotherapy and may last for a few days. Please contact the hospital if this happens. Your doctor can prescribe painkillers if appropriate.

- **Change of taste**

You may notice that food tastes different. Normal taste usually comes back after treatment finishes.

- **Nail changes**

May cause nail changes and discolouration of the nail bed. These changes should be temporary and the condition of your nails should improve when treatment finishes.

- **Cough**

Sometimes you might start to cough and bring up phlegm (spit) during the course of treatment. Let your Christie doctor, nurse clinician, or GP know if you find this troublesome or the phlegm becomes discoloured.

- **Tingling and numbness in the fingers or toes**

This is due to the effect of the chemotherapy on the nerves and is known as peripheral neuropathy. You may also notice that you have difficulty doing up buttons or similar tasks. Tell your doctor if you notice any numbness or tingling in your hands or feet. This usually improves a few months after treatment has finished although this may be permanent.

Other medicines

Some medicines can be harmful to take when you are having chemotherapy. Let your doctor know about any medications you are taking, including non-prescribed medicines such as complementary therapies and herbal remedies.

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 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.

For female patients only:

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 Now (either from your specialist nurse, the information centre at The Christie, or online).

Late side effects of radiotherapy

• **Narrowing of the gullet:**

Scarring caused by the radiotherapy might cause a narrowing in the gullet. Sometimes you will need a minor procedure to stretch the gullet or, very rarely, surgery. But this does not necessarily mean that your cancer has come back.

• **Breathlessness**

Radiotherapy may leave the lungs with some scarring (fibrosis). Although every effort is made to minimise the radiation dose to lungs, sometimes you might notice a slight increase in shortness of breath. If this becomes a problem, make an appointment with your Christie doctor or GP as sometimes medicine or breathing exercises might help.

• **Chest or rib pain**

Rarely, radiotherapy can cause inflammation of the ribs leading to thinning of the bones. It is possible that a rib can break particularly after a bout of coughing or mild injury.

• **Spinal cord damage**

Radiotherapy may in extremely rare cases lead to injury to the spinal cord which can cause permanent difficulties in walking and loss of sensation in the lower body. Every effort is made to plan your treatment carefully so as to avoid this problem.

Late side effects of chemotherapy

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.

- **Tingling and numbness in the fingers or toes:** this may become permanent.

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.

What can you do to help yourself?

It is very important that you try to keep your weight stable before and during the treatment. Try to eat small frequent meals or snacks throughout the day. Ask the radiotherapy or nursing staff for a copy of 'Eating – help yourself' which has detailed information about coping with problems such as difficulty in swallowing, nausea and lack of appetite.

You may need nutritional supplements if you are losing weight or you are not eating very well. They are available on prescription from your doctor. Ask for a copy of the booklet 'Nutritional supplements' for ideas. If you have any questions you can contact the dietetic department for general advice on **0161 446 3729**.

Take things easy whilst you are having treatment. Don't push yourself too hard – it only means that your body needs extra time to recover later.

Support groups and information

Oesophageal Patients Association

Tel: **0121 704 9860**

www.opa.org.uk

Macmillan Cancer Support

Tel: **0808 808 00 00** (for information about cancer)

www.macmillan.org.uk

Cancer information centre

Tel: **0161 446 8100**

We hope that this information will help you to understand your proposed treatment. If you have any questions please contact:

Clinical nurse specialists:

Vikki Owen-Holt **0161 918 7368**

Esther McQueenie **0161 956 1073**

Sarah Tillott **0161 956 1073**

Consultant clinical oncologists:

Dr Hamid Sheikh **0161 446 3223**

Lubna Bhatt **0161 446 8580**

Ganesh Radhakrishna **0161 446 3820**

Radiotherapy reception desk **0161 446 3485**
Chemotherapy nurse **0161 918 7171**
For 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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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 **the-christie.patient.information@nhs.net**

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