

# Chemo-radiotherapy to the stomach post-operatively with Capecitabine

## Chemo-radiotherapy to the stomach post-operatively

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 stomach and had an operation. Your Christie consultant has recommended that the best treatment for you now is radiotherapy with chemotherapy.

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 eight weeks in total.

Capecitabine chemotherapy tablets are taken twice daily for fourteen days (weeks 1 & 2). Week 3 is a rest week during which you may have radiotherapy appointments.

*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 oral capecitabine *chemotherapy* which is given as shown in the schedule below.

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Monday to Sunday	Monday to Sunday		Monday to Friday	Monday to Friday	Monday to Friday	Monday to Friday	Monday to Friday
Capecitabine			Capecitabine and Radiotherapy				



Radiotherapy starts at the beginning of week 4 and is delivered on Monday to Friday for 5 weeks. The capecitabine chemotherapy tablets are also re-started but only taken on weekdays (same days as the radiotherapy treatment). You will need to take these tablets twice a day.

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

- blood tests
- radioisotope scans to check your kidney function
- radiotherapy planning (you will need to make several visits to the radiotherapy department before treatment begins – see below)

## Taking capecitabine (see capecitabine patient information leaflet/ patient diary)

Capecitabine tablets come in two strengths: 150mg and 500mg tablets. You will have **two** separate boxes, one for each strength. Your height and weight will help us to calculate how many tablets you need to take.

1. Take the tablets twice a day [morning and evening] 10 to 12 hours apart.
2. Take the tablets within 30 minutes after food, for example, after breakfast and an evening meal. It doesn't have to be a large meal. It can be a snack such as a sandwich.
3. Take the tablets with water only.
4. Store your tablets in a cool dry place.
5. **If you miss a dose do not double up the next dose. Take your regular dose at the next scheduled time. Bring back any left-over tablets to clinic.**

Capecitabine will interact with warfarin (a blood thinning tablet). You should tell your doctor if you are taking warfarin and a different blood thinning agent can be prescribed. Capecitabine also interacts with phenytoin and allopurinol. Tell your doctor if you are taking these drugs.

When you collect your tablets from pharmacy, a member of the pharmacy team will discuss the side effects and advise you when to call The Christie Hotline.

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.

## 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 special X-ray machine called a 'simulator' and/or on a CT scanner. While you are on a simulator or CT scanner, you will need to remove any clothing covering the area being treated. The staff may ask you to swallow barium liquid agent to confirm that the right place has been identified.

An X-ray is taken in the simulator. 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. A few days after this you will have a CT scan. Your doctors will use this to target the radiotherapy with reference to other investigations you have already had.

## 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.

## 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.

## What are the side effects?

### Common side effects (more than 1 in 10)

- **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 or vomiting**

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. If you are taking capecitabine and you feel sick or are sick, please contact The Christie Hotline for advice.



- **Diarrhoea**

If you are taking capecitabine tablets and you have diarrhoea (more than 4 times in a day or once during the night) stop taking the tablets and contact The Christie Hotline straight away on 0161 446 3658.

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. As the staff for a copy of 'Eating: help yourself' which has some useful ideas about diet when you are having treatment.

- **Watery eyes**

Your eyes may also water. Often, this will improve in time and needs no specific treatment but if you have ongoing symptoms please discuss this with your doctor or nurse.

- **Swallowing problems or heartburn**

The lining of the gullet becomes irritated during the treatment. You may feel as if you have a burning sensation 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. Occasionally your doctor may try using an acid suppressant.

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'.

- **Skin**

The skin in the treated area might become a little pink or even red. You may find that the skin in the treatment area becomes red, sore and itchy. The severity of this reaction varies and depends on skin type (pale or darker skin). 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.

- **PPE (palmar-plantar erythema)**

The skin on your hands and feet may become very dry, red and sore with some cracking. Tell your doctor. Cream and tablets can be given which can help. Your chemotherapy dose may need to change. Try to keep your hands and feet cool and if possible, uncovered. **If you are taking capecitabine tablets and your hands and/or feet become sore, please contact The Christie Hotline on 0161 446 3658 for advice.**



### **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 for advice.**

- **Strange taste**

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.

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

- **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.

## **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.

### **Testing for DPD deficiency**

The body makes enzymes which break down chemotherapy drugs so that chemotherapy doesn't build up in the body and cause severe side-effects. A very small percentage of the population (approximately 1 in 20), either don't produce or produce less of an enzyme called DPD which would normally break down the chemotherapy drugs 5FU and capecitabine. This is called DPD deficiency. Reduced production of DPD is not an issue in day-to-day life, but it might mean that some patients experience severe and sometimes life-threatening side effects after 5FU or Capecitabine chemotherapy is given. Patients with DPD deficiency are more likely to develop severe mouth ulcers and diarrhoea and very low blood counts increasing vulnerability to life threatening infections.

In order to check that it is safe for you to have this treatment, your team will be arranging a one off blood test. This test checks for some of the commonest abnormalities which can cause DPD deficiency.

Although DPD testing identifies many patients who are at risk of severe side-effects from 5FU and capecitabine, it does not identify all at risk patients. Severe and sometimes life-threatening side-effects

can occur in patients who have had a normal test result. Therefore it is important that patients receiving chemotherapy monitor their symptoms carefully and contact The Christie Hotline if they become unwell.



### **Chest pain or stroke**

A small number of patients receiving capecitabine can experience chest pain (angina) or rarely have a heart attack. Extremely rarely this may lead to death. Other complications such as a stroke or a mini-stroke can happen but are exceptionally rare. If you develop any of these symptoms you should either contact The Christie Hotline on **0161 446 3658** for advice or in an **emergency** you should go immediately to your **nearest Accident & Emergency department**. You may have an electrocardiograph (ECG) to check your heart before you start your chemotherapy.

#### **• Blood clots**

During chemotherapy you are more at risk of blood clots in the legs (DVT) or lungs (PE). Occasionally these clots can be life-threatening. To help prevent clots, keep mobile and drink plenty of non-alcoholic fluids.

### **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 effects can include:**

- Scarring of the lining of the bowel (adhesions) which can lead to bouts of abdominal pain or sickness. This could be mild and require simple bowel rest or be more serious requiring an operation. This is a rare side effect.

- Chronic diarrhoea (malabsorption) caused by a reduction in pancreatic digestive enzyme production. The doctor can prescribe oral supplementary medication.
- Impairment of kidney function which can lead to high blood pressure (hypertension). This can be monitored and treated.

- **Breathlessness or cough**

Radiotherapy may leave the lungs with some scarring (fibrosis). This can mean that your lung doesn't work quite as well as it did before, and you may notice a slight increase in breathlessness or a cough. If this happens, make an appointment to see your GP or Christie doctor. It may be possible to learn breathing exercises or use medicine that will help reduce your breathlessness, but in some rare cases the breathing deterioration can be irreversible.

- **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.

## What can I do to help myself?

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**.

If you are smoking, then it may be best to try to stop or reduce the number of cigarettes you smoke. Also, if you drink alcohol, it may be best to limit your intake and not drink any spirits. Please contact the smoking cessation and alcohol service for advice on **0161 956 1215** or **07392 278 408**.

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.

## What support is available?

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	<b>0161 918 7368</b>
Esther McQueenie	<b>0161 956 1073</b>
Sarah Tillott	<b>0161 956 1073</b>
Community nurse/Macmillan nurse	(please ask to be referred)

## Support groups and information

Oesophageal Patients Association

Tel: **0121 704 9860**

[www.opa.org.uk](http://www.opa.org.uk)

Macmillan Cancer Support

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

[www.macmillan.org.uk](http://www.macmillan.org.uk)

Cancer information centre at The Christie

Tel: **0161 446 8100**

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

Vikki Owen-Holt	<b>0161 918 7368</b>
Esther McQueenie	<b>0161 956 1073</b>
Dr Hamid Sheikh, Consultant clinical oncologist	<b>0161 446 3223</b>
Dr Mark Saunders, Consultant clinical oncologist	<b>0161 446 3357</b>
The Christie Hotline	<b>0161 446 3658</b>
Radiotherapy reception desk	<b>0161 446 3485</b>

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 **[the-christie.patient.information@nhs.net](mailto: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

