

## Mitomycin C and Fluorouracil

The possible benefits of this 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. 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 has prescribed for you a treatment which includes the chemotherapy Mitomycin C and Fluorouracil, also called 5FU. Your treatment will be given:

**Day 1:** Mitomycin C by bolus [short injection] followed by

Fluorouracil given via a drip over ..... or

Via a pump over ..... days.

The treatment is repeated every ..... weeks for .....cycles.

You will have a routine blood test before the start of each treatment.

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.

**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.

### 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.

- **Chest pain or stroke (Warning!)**

A small number of patients receiving 5-Fluorouracil (5FU) or capecitabine can experience chest pain (angina) or rarely have a heart attack. Extremely rarely this may lead to death. Other complications such as stroke or mini-stroke can happen but are exceptionally rare. If you develop any of these symptoms you should contact your hospital doctor for advice. In an emergency you should go immediately to your nearest accident and emergency department.

## Common side-effects (more 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 (Warning!)**

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.

- **Nausea and vomiting (sickness)**

The severity of this varies from person to person. Anti-sickness medication may be given along with your chemotherapy to prevent this. You may 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.

- **Diarrhoea (Warning!)**

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

- **Lethargy**

Some chemotherapy may make 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.

- **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.

- **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.

## • Skin and nail changes

**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 prescribed to help. Your chemotherapy dose may need to change. Try to keep your hands and feet cool and if possible, uncovered.

**Hyperpigmentation:** Less commonly, 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. The skin will return to normal when treatment is finished.

**Increased sensitivity to the sun:** Your skin will tan or burn in the sun more easily. Sit in the shade, avoid too much sun and use a high factor sunblock cream and wear a hat.

**Nail changes:** You may have a blue tinge or darkening of the nails, flaking of the nails or pain and thickening of the area where the nail starts growing.

## • Darkening of the veins

Fluorouracil can irritate the vein wall and can cause discolouration. So you may get brown marks along the course of the vein where the drip was inserted, and your arm can also become itchy. This will usually fade over time. Please tell your hospital doctor at your next appointment if you have any problems.

## • Hair thinning

Some hair loss may occur during treatment although this is unlikely. 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. 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](mailto: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](mailto:manchester@maggiescentres.org).

## 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.

## • 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.

Continued...

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. Your medical team will discuss the test results with you and can confirm whether you will be able to go ahead with your planned chemotherapy, or whether any changes need to be discussed.

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.

## **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.

## **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:

Administration enquiries - **0161 918 7606/7610**

Chemotherapy nurse - **0161 918 7171**

Clinical trials unit - **0161 918 7663**

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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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**

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