

Gemcitabine and Oxaliplatin

The possible benefits of treatment vary; for some people this 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 a course of treatment with Gemcitabine and Oxaliplatin.

The treatment is given in cycles of 3 weeks.

Treatment is given for cycles.

Week 1 Gemcitabine as a drip over 30 minutes
Oxaliplatin as a drip over 2 hours

Week 2 Gemcitabine as a drip over 30 minutes

Week 3 Week off

You will have a routine blood test before the start of each cycle of treatment. Occasionally, we may not be able to go ahead with your treatment until your blood counts are back to a safe level. If this happens, your chemotherapy may be delayed a week or more.

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 risks 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.

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

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.

• Flu-like symptoms and headaches

Some chemotherapy may cause flu-like symptoms such as fever, aches and pains and shivering about 3 to 5 hours after it is given. These symptoms are temporary and should go within 12 to 24 hours. Paracetamol will help. If your symptoms are particularly severe, tell your doctor on your next visit.

• 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.

• Numbness in the fingers and toes

Oxaliplatin can increase the sensitivity of nerve endings. You may develop pins and needles, tingling or numbness, or pains like small 'electric shocks' and may have difficulty in carrying out delicate tasks such as buttoning clothes (this may sometimes occur in association with cramps) which may last for a few days. These symptoms are often triggered by exposure to cold. Take care with extreme drops of temperatures, for example, opening fridge/freezers. Avoid drinking iced drinks and eating very cold food for 24 hours before the treatment and for 24 hours afterwards. The chance of these symptoms occurring increases as you receive more oxaliplatin and will improve over time once you stop treatment. Rarely, the numbness can be permanent. It may be necessary to interrupt or stop the oxaliplatin if numbness and tingling are causing you problems. Take care when using hot water as you may burn yourself. Use protective gloves when cooking and gardening. **(See Appendix for further information).**

• Skin and nail changes

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.

Uncommon side effects (less than 1 in 10)

• Fluid retention

Your feet or legs may become swollen with this chemotherapy. If this is mild, no specific treatment is needed. Keeping your feet and legs raised may help. Tell your doctor if the swelling is severe.

- **Skin rash**

You may develop a skin rash. This is usually mild and easily treated. Please tell your doctor on your next visit.

- **Mild nausea and vomiting (sickness)**

You may have mild nausea and vomiting. You may be given anti-sickness tablets to take at home. If you continue to feel or be sick, contact your GP or The Christie. Your anti-sickness medication may be changed or increased.

- **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. 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.

- **Upset bowels**

You may get upset bowels with this chemotherapy:

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

Constipation Try to drink plenty of fluids and eat foods high in fibre. Tell your doctor who may prescribe a suitable laxative.

- **Watery eyes**

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

- **Vein pain**

This chemotherapy can cause pain along the vein during and after treatment. This should only be temporary but contact your hospital doctor or nurse if this becomes severe.

- **Infusion reactions**

Sometimes you may experience unpleasant feelings in the throat, particularly when swallowing which can give the sensation of shortness of breath. However, you will be able to breathe normally. These sensations usually occur while you are having oxaliplatin and may be dealt with by slowing the infusion of oxaliplatin from 2 - 6 hours. Also taking a warm (not hot) drink can help if cold air is causing you swallowing difficulties. Rarely patients can experience jaw pain.

- **Extravasation**

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.

• Herbal medicine

Some herbal medicine including St John's Wort can affect the chemotherapy. You should let your doctor or nurse know if you are taking any herbal medication, complementary or alternative medicine, including vitamins, minerals and medicines purchased over-the-counter.

Rare side effects (less than 1 in 100)

• Breathlessness

Very rarely, this chemotherapy can cause inflammation of your lungs. This can make you breathless. Tell your doctor if you develop this problem while you are having this chemotherapy. Stopping taking the chemotherapy and taking steroids will help.

• Allergic reactions

Whilst receiving the oxaliplatin patients rarely can feel hot, faint, breathless, sick, or develop an itchy rash. These can be symptoms of an allergic reaction. If an allergic reaction is suspected the oxaliplatin drip will be stopped and medications can be given to settle the allergic reaction. Allergic reactions are more likely to occur after several months of treatment, or when the treatment is being re-started after a treatment break. If treatment is being re-started after a break, additional drugs are given to reduce the risk of an allergic reaction occurring. If you have an allergic reaction to oxaliplatin your doctor will discuss with you what treatment options are available.

• Severe skin reaction (Warning!)

Very rarely, you may develop a severe skin reaction. If you experience tender, red skin patches which subsequently blister, **please seek urgent medical advice**. The skin patches may be preceded by fever, chest symptoms and photophobia (a need to squint or close your eyes, which is worse in bright light). These symptoms may be caused by a conditions called Toxic Epidermal Necrolysis (TEN) and Stevens Johnson Syndrome (SJS).

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.

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

Your consultant is:

Your hospital number is:

Your key worker is:

Appendix

Oxaliplatin-induced peripheral neuropathy

Oxaliplatin is a commonly prescribed drug used in the treatment of cancer. It has been used for many years, and the safety profile and side-effects are well known. Peripheral neuropathy (nerve damage) is a common side effect due to the effects of oxaliplatin on the nerves. Almost all patients experience temporary symptoms of pins and needles exacerbated by exposure to the cold. However, repeated treatment can cause persistent numbness to develop in more than 30% of patients treated with oxaliplatin, which can be long lasting, troublesome and permanent in up to 10% of patients.

It is important that patients and their carers are alert to the signs and symptoms of peripheral neuropathy. The symptoms should improve slowly after the treatment has finished, but in some people they may never go away and have potential to affect their quality of life forever. Sometimes the effects of the nerve damage become apparent, or even worsen after the discontinuation of the chemotherapy.

Signs and symptoms of peripheral neuropathy:

For most individuals, tingling in hands will be triggered by anything cold, such as iced drinks and cold air. If you notice that your symptoms are related to the cold, you should avoid cold food and drinks and wrap up warmly (wear gloves, socks and a scarf to cover your nose and mouth) in the cold weather. Use gloves when taking things out of the freezer or fridge. These symptoms are generally short lived and expected with the use of oxaliplatin. If however you have these symptoms all the time, you do need to inform the cancer specialist and the nurse treating you.

The symptoms of peripheral neuropathy are known to worsen in terms of severity and duration with successive treatments. This is known as a cumulative effect. These symptoms can include numbness, tingling and cramping of the hands and feet. You may also find it hard to fasten buttons or to do other fiddly tasks such as tying shoelaces. In more severe or established cases you can experience difficulties writing, using a computer keyboard or difficulties in day to day walking (unable to feel the ground). In severe cases, these symptoms can mean that it is no longer safe for a patient to drive. This is why we want to emphasise the need to stop the drug in a timely manner, rather than carry on too long, causing more difficulties.

The medical team would want to review and adjust the dose of the oxaliplatin drug to account for this and reduce the risk of more severe permanent nerve damage. Therefore every time you attend for a chemotherapy review you should be asked whether you have had any numbness, cramping or tingling of the hands or feet and whether they are worsening.

If persistent symptoms are present, the oxaliplatin drug will be stopped. There is no proven treatment to help reverse existing nerve damage, although symptoms often improve slowly over time. If you have pain associated with the numbness additional medications may be suggested to try to help reduce the pain. If a clinical trial is available your medical team will discuss this with you.

Self-care advice:

- Whilst receiving and after treatment with oxaliplatin, avoid cold temperatures and objects. For example, cold drinks, ice cream, washing in cold water. Many patients wear gloves when using the fridge or freezer.
- Cover yourself with a blanket while you are receiving your oxaliplatin infusion.
- In winter, after receiving your treatment, take care when leaving the chemotherapy unit as the cold air outdoors can cause you to feel like you can't get your breath. Put on a scarf, gloves and warm coat before going outdoors.

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Self-care advice:

- During the summer, avoid direct contact with air conditioning.
- If persistent symptoms occur mention this at your next hospital visit to the medical or nursing teams so that we can discuss what to do next.

If your tingling or numbness symptoms are persisting or worsening all the time (i.e. no full recovery before next dose), you should certainly inform your cancer specialist and chemotherapy nurse when you attend for a review.

The earlier the medical and nursing team are made aware of any signs of nerve damage, the sooner your treatment plan can be adjusted to reduce the risk of you developing any long-term nerve damage.

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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