



Ifosfamide for children and young people

An information guide for parents, carers and young adult patients

The purpose of this guide is to give information about the use of ifosfamide to parents, carers and young people undergoing treatment for cancer.

Please read this guide carefully alongside any patient information provided by the manufacturer. We have written this guide to give you more information about the use of this medicine in children and young people. Keep it somewhere safe so you can read it again.

What is ifosfamide?

Ifosfamide is a chemotherapy medicine used to treat many different types of cancers. It may be given alone or with other chemotherapy medicines as part of a treatment plan.

How is ifosfamide given?

Ifosfamide is given directly into a vein. This is called an 'intravenous' or 'IV infusion'. It is usually given through a central or PICC line, or implantable port. Your medical team will talk to you about which is most appropriate.

It is usually given as a short infusion over one to three hours, sometimes longer. Ifosfamide is always given with intravenous fluids to make sure it can be cleared from the kidneys. A drug called mesna is also given with the intravenous fluids to prevent irritation of the bladder. While having ifosfamide nurses will monitor how much fluid is being given and regularly test wee to check for any blood.

Are there any side effects?

It is important to remember that everyone reacts differently to chemotherapy. Some will have very few side effects whilst others will have more. The side effects listed below will not affect everyone who is given ifosfamide and may be different if more than one chemotherapy drug is given.

What are the common side effects?

Reduced bone marrow function

Blood counts will be checked regularly to see how the bone marrow is working. A low neutrophil count means there is a greater risk of infection. A low haemoglobin count indicates anaemia, which can cause more tiredness than usual. A low platelet count may cause bruising or bleeding.

Please contact your medical team if there are any signs of infection, especially a high temperature, unusual tiredness, bruising or bleeding.

Nausea (feeling sick) and vomiting (being sick)

Anti-sickness medicines will be given to reduce or prevent these symptoms. These medicines will continue throughout each treatment cycle containing ifosfamide.

If sickness or feeling sick continues, talk to your team as they may be able to change the anti-sickness medicines. If sickness is not controlled after going home, contact your team for further advice.

Effects on the kidney

Ifosfamide may affect how the kidneys work. This is usually mild and goes back to normal once treatment finishes. Regular blood tests will be taken to check kidney function. Specific kidney tests may also be done before and throughout treatment.

Effects on the liver

Ifosfamide can cause changes to how the liver works. This should return to normal when the treatment finishes. Regular blood tests will be taken to check liver function (called LFTs - liver function tests).

Irritation of the bladder wall

Ifosfamide may cause irritation and inflammation of the bladder wall, which can lead to blood being found in wee. To reduce the risk of this happening intravenous (IV) fluids and a drug called mesna are given.

Mesna is usually given as a continuous infusion for up to 24 hours after the last dose of ifosfamide. If the treatment plan involves lots of different chemotherapy drugs, mesna may be given as short infusions, or bolus injections throughout the day. Occasionally, mesna may be given orally.

Nurses will check wee regularly for any traces of blood, using dipsticks. If there is pain while weeing or any blood can be seen please tell your medical team.

Hair loss

Some or all hair may fall out, including eyebrows and eyelashes. This is temporary and hair will grow back after treatment finishes.

What are the less common side effects?

Effects on the nervous system

Ifosfamide may affect the nervous system and can sometimes cause a problem known as 'encephalopathy'. This causes symptoms such as confusion, tiredness or sleepiness, hallucinations and loss of concentration. This can happen a few hours or days after receiving ifosfamide. If encephalopathy develops, it is important that ifosfamide is stopped and treatment may be needed. If any of these symptoms occur tell your medical team straightaway.

Other cancers

There is a very small risk of developing another cancer after many years. If you would like more information, please talk to your doctor.

Diarrhoea

Diarrhoea means passing more poo than is normal for you, or having watery or loose poo. Stomach cramps can be experienced alongside diarrhoea. This is usually mild. If diarrhoea is severe or continuous, contact your team for advice.

Sore mouth and mouth ulcers

If a sore mouth or small ulcers develop, contact your medical team for advice. Always follow the advice from your hospital for good mouth care during treatment.

Loss of appetite

Ifosfamide can affect appetite. It is normal to not feel like eating much whilst having ifosfamide, so try not to worry. If appetite does not come back after a few days, talk to your team. They will be able to give advice and may suggest some food or drink supplements.

Important to watch for:

If ifosfamide leaks into the tissues around where it is being given, it may damage the skin and tissue in this area. If there is any pain, irritation or a burning sensation, tell your medical team immediately.

Which tests/investigations may be needed?

A full blood count and blood tests for liver and kidney function are taken routinely before each treatment with ifosfamide. It is important that these tests are within the normal range before another cycle of ifosfamide is given. If full blood counts have not recovered, then the next cycle may be delayed.

These tests may be done at other times depending on the side effects experienced.

Kidney function tests

Ifosfamide can affect how well the kidneys work. A test may be needed to measure how the kidneys are working before, and at time points during, treatment. This is called a Glomerular Filtration Rate or GFR test. Your medical team will explain if this is needed and how often.

Does ifosfamide interact with any other medicines?

Some medicines can affect how well ifosfamide works, so always tell the doctor about any other medication being taken. Check with your doctor or pharmacist before taking any other medicines. This includes supplements, herbal and complementary medicines.

Pregnancy

If a person is sexually active while taking anti-cancer medicines or drugs, it is important to use contraception such as condoms, the pill or coil to avoid pregnancy. A pregnancy test may be needed before taking this medicine. Contraception should continue for a while after treatment finishes. Your team will advise how long contraception should continue for.

Fertility

Depending on the type, dose and combination of medicines given during your treatment, it is possible that fertility may be affected. For girls, this means that it may be harder for them to become pregnant in the future. For boys, this may mean that their sperm is less fertile, which can affect their chance of having children in the future. If you would like more information about this please discuss with your medical team.

If you have any questions about ifosfamide, please contact your treating hospital. This guide only gives general information.

Always discuss individual treatment with your medical team. Do not rely on this guide alone for information about treatment.

Useful information

CCLG: The Children & Young People's Cancer Association publishes a variety of free resources to order or download at www.cclg.org.uk/publications



Scan to order or download this factsheet or any other CCLG publications FREE of charge.

Young Lives vs Cancer provides practical support and advice for children and young people affected by cancer and their families.
www.younglivesvscancer.org.uk

Macmillan Cancer Support offers support and advice to those affected by cancer.
www.macmillan.org.uk

EMC (Electronic Medicines Compendium) offers up-to-date, approved and regulated information for licensed medicines.
www.medicines.org.uk



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We are CCLG: The Children & Young People's Cancer Association, a charity dedicated to creating a brighter future for children and young people with cancer. Powered by expertise, we unite the children and young people's cancer community, driving collective action and progress.

We fund and lead pioneering research, provide trusted information and guidance for children and young people with cancer and their families, and bring together professionals to improve treatment, care and outcomes.

Our expert information helps children and young people, and everyone supporting them, to navigate the challenges of cancer and its impact, offering reassurance and clarity when it's needed most.

We make every effort to ensure that this information is accurate and up to date at the time of printing. Information in this publication should be used to supplement appropriate professional or other advice specific to your circumstances.

Our work is funded by donations. If you would like to help, visit www.cclg.org.uk/donate or text 'CCLG' to **70085** to donate **£3**. You may be charged for one text message at your network's standard or charity rate. CCLG will receive 100% of your donation.



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