



KEEP ALL MEDICINE OUT OF THE SIGHT AND REACH OF CHILDREN

FOLFOX

What FOLFOX is

FOLFOX is the name of a combination chemotherapy treatment used to treat bowel cancer. It is made up of the drugs

- FOL = Folinic acid (also called leucovorin, FA or calcium folinate)
- F = Fluorouracil (5FU)
- OX = Oxaliplatin

Folinic acid is a vitamin you take along with fluorouracil because it makes the chemotherapy more active against cancer cells. It is very unlikely you will have any side effects from it, although it occasionally causes a high temperature.

How you have FOLFOX

- You have these drugs into your bloodstream (intravenously). You can have them through a thin, short tube (a cannula) put into a vein in your arm each time you have treatment. Or you may have them through a central line, a portacath, or a PICC line. These are long, plastic tubes that give the drugs directly into a large vein in your chest. You have the tube put in just before your course of treatment starts and it stays in place as long as you need it.
- You usually have chemotherapy as cycles of treatment. The number of cycles of treatment you need depends on your situation but you may have up to 12. Each treatment cycle lasts 2 weeks.
- On the first day you have folinic acid and oxaliplatin through a drip over 2 hours. You have two drips at the same time. Then you have an injection of fluorouracil into the cannula or central line. You then start an infusion of 5FU through a drip or pump, which lasts for 22 hours.
- On the second day you have folinic acid through a drip for 2 hours. You then have an injection of fluorouracil, followed by another fluorouracil infusion through a drip or pump for 22 hours. You then have no treatment for 12 days. After that you start another treatment cycle.
- If you have a central line you may be able to have the infusions of fluorouracil at home. If you are at home, you have the infusions through a small pump. You can keep the pump in a small bag, or a bag on a belt (like a bum bag). You'll need to go back to the hospital for the second day of your treatment, to have the pump changed. Or sometimes a chemotherapy nurse may be able to change the infusion at your home.
- When the second infusion of 5FU is finished, your nurse will disconnect the drip and take the cannula out. If you have a central line this will stay in but it will be blocked with a plastic cap until you start your next treatment cycle.

Common side effects

More than 10 in every 100 people have one or more of the side effects listed below.

- A temporary drop in the number of blood cells made by the bone marrow. This may cause
- An increased risk of getting an infection from a drop in white blood cells – it is harder to fight infections and you can become very ill. You may have headaches, aching muscles, a cough, sore throat, pain passing urine or feel cold and shivery



KEEP ALL MEDICINE OUT OF THE SIGHT AND REACH OF CHILDREN

- Tiredness and breathlessness due to a drop in red blood cells (anaemia) – you may need a blood transfusion
- Bruising more easily due to a drop in platelets – you may have nosebleeds, bleeding gums after brushing your teeth, or lots of tiny red spots or bruises on your arms or legs (known as petechia)
- Some of these side effects can be life threatening, particularly infections. Contact your doctor or nurse straightaway if you have any of these effects. Your doctor will check your blood counts regularly to see how well your bone marrow is working.
- Other common side effects include
- Fatigue (tiredness) during and after treatment – most people find their energy levels are back to normal within 6 months to a year
- Numbness or tingling in the fingers and toes happens to nearly everyone having oxaliplatin and is usually worse if you are cold – you may have trouble with fiddly tasks such as doing up buttons. This can start a few days or weeks after treatment and usually goes away within a few months of the treatment finishing
- Feeling or being sick happens to about 7 out of every 10 (70%) people who have oxaliplatin, but is usually well controlled with anti sickness drugs. If the sickness is not controlled, let your nurse know as there are other anti sickness medicines that may work better for you
- Pain in the vein during the infusion of oxaliplatin or folinic acid – sometimes the drugs may need to be given more slowly
- Some people develop soreness, redness and peeling on the palms of the hands and soles of the feet (plantar palmar syndrome) which may cause tingling, numbness, pain and dryness
- Diarrhoea happens to 6 out of 10 people (60%) – tell your doctor or nurse if it becomes severe, if you can't drink to replace the lost fluid, or if it carries on for more than 3 days. Your nurse may give you anti diarrhoea medicine to take home with you after chemotherapy
- A sore mouth happens to 4 out of 10 people (40%)
- Loss of fertility – we don't know exactly what effect these drugs may have on your fertility. It is important to talk to your doctor before starting treatment if you plan to have a baby in the future
- Women may stop having periods (amenorrhoea) but this may be temporary
- Between 1 and 10 in every 100 people have one or more of these.
- Sensitivity to the sun – cover up and stay in the shade while you are having this treatment and use a high factor sun cream on any exposed skin
- Brown marking on the skin following the line of the vein where the chemotherapy has been injected
- Hair thinning
- Brittle, chipped and ridged nails
- Gritty eyes, blurred vision or watery eyes from increased production of tears



KEEP ALL MEDICINE OUT OF THE SIGHT AND REACH OF CHILDREN

Rare side effects

Fewer than 1 in 100 people have these.

- Difficulty swallowing or breathing can be triggered by cold air in the first 5 days after you have oxaliplatin but usually clears up on its own – tell your doctor or nurse if you have this side effect and avoid cold drinks or ice cubes for the first few days
- Ringing in the ears (tinnitus) happens in about 1 in 100 people (1%) and usually gets better gradually after your treatment is finished
- Allergic reactions happen to about 1 in every 100 people (1%) while the oxaliplatin is going into your bloodstream – tell your nurse if your face goes red, or you have an itchy rash, or feel faint or breathless. Your nurse will watch for signs of an allergic reaction while you are having the treatment

Important points to remember

The side effects above may be mild or more severe. A side effect may get better or worse through your course of treatment, or more side effects may develop as the course goes on. This depends on

- How many times you've had the drug before
- Your general health
- The amount of the drug you have (the dose)
- Other drugs you are having

Coping with side effects

Talk to your doctor, pharmacist or nurse about all your side effects so that they can help you manage them. They can give you advice or reassure you. Your nurse will give you a contact number to ring if you have any questions or problems. If in doubt, call them.

Other medicines

Tell your doctor about any other medicines you are taking, including vitamins, herbal supplements, and over the counter remedies – some drugs can react together.

Pregnancy and contraception

These drugs may have a harmful effect on a developing baby and it is not advisable to become pregnant or father a child if you are having this treatment. Talk about contraception with your doctor or nurse before treatment starts.

Breastfeeding

Breastfeeding is not advisable during this treatment because the drug may come through in the breast milk.

Medical and dental treatment

If you need to go into hospital for any reason other than cancer, always tell the doctors and nurses that you are having chemotherapy. Give them contact details for your cancer doctor.

Talk to your cancer doctor or nurse if you think you need dental treatment. Always tell your dentist you are having chemotherapy.



KEEP ALL MEDICINE OUT OF THE SIGHT AND REACH OF CHILDREN

Immunisations and chemotherapy

- You should not have immunisations with live vaccines while you are having chemotherapy or for at least 6 months afterwards. These include rubella, mumps, measles (usually given together as MMR), BCG, yellow fever and Zostavax (shingles vaccine).
- You can have other vaccines, but they may not give you as much protection as usual until your immune system has fully recovered from your chemotherapy. It is safe to have the flu vaccine.
- It is safe for you to be in contact with other people who've had live vaccines as injections. There can be problems with vaccines you take by mouth (oral vaccines), but not many people have these now. So there is usually no problem in being with any baby or child who has recently had any vaccination. You might need to make sure that you aren't in contact with anyone who has had oral polio, cholera or typhoid vaccination recently, particularly if you live abroad.