



KEEP ALL MEDICINE OUT OF THE SIGHT AND REACH OF CHILDREN

Melphalan (Alkeran)

What is melphalan?

Melphalan is a treatment for several different types of cancer, including multiple myeloma, advanced ovarian cancer and advanced breast cancer. It is also known as Alkeran.

How melphalan works

- Melphalan is one of a group of drugs called alkylating agents. It sticks to one of the cancer cell's DNA strands. DNA is the genetic code that is in the nucleus of all animal and plant cells. It controls everything the cell does. The cell cannot then grow and divide into 2 new cells.
- How you have melphalan
- Melphalan is a clear liquid that you have as a drip (intravenous infusion).
- Melphalan also comes as white tablets that you take on an empty stomach. You swallow them whole with a glass of water. Do not crush or chew the tablets. You should store them in the fridge. It is very important that you take tablets according to the instructions your doctor or pharmacist gives you. For example, whether you have a full or empty stomach can affect how much of a drug gets into your bloodstream. You should take the right dose, not more or less. And never stop taking a cancer drug without talking to your specialist first.
- If you accidentally take more melphalan than you should, tell your doctor or go to a hospital straight away.
- If you forget to take melphalan tell your doctor. Don't take a double dose to make up for the missed dose.
- Tests during treatment
- You have blood tests before starting treatment and regularly during your treatment. The tests check your levels of blood cells. They also check how well your liver and kidneys are working.

Common side effects

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

- 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, a sore throat, pain passing urine, or you may feel cold and shivery. If you have a severe infection this can be life threatening.
- **Contact your treatment centre straight away if you have any of these effects or if your temperature goes above 38°C**
- 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)
- Tiredness and weakness (fatigue) during and after treatment – most people find their energy levels are back to normal within 6 months to a year
- Feeling or being sick happens to about 1 in 3 people (33%) and is usually mild if you take melphalan tablets, but can be more severe with melphalan through a drip – tell your doctor or nurse if your anti sickness medicine isn't helping because there are other medicines you can try



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- A tingling or warm feeling along the vein during injection of melphalan
- Inflammation around the drip site – if you notice any signs of redness, swelling or leaking at your drip site, tell your doctor or chemotherapy nurse straight away
- Loss of fertility – you may not be able to become pregnant or father a child after treatment with melphalan. Talk to your doctor or nurse before starting treatment if you think you may want to have a baby in the future. Men may be able to store sperm before the treatment starts
- Women may stop having periods (amenorrhoea), but this may only be temporary
- Diarrhoea – drink plenty of fluids and tell your doctor or nurse if diarrhoea becomes severe, or continues for more than 3 days

Occasional side effects

Between 1 and 10 in every 100 people have one or more of these effects.

- Hair loss
- Higher levels of a chemical called urea in the blood in people who have myeloma and kidney problems
- An allergic reaction happens to about 1 in 100 people (1%) having melphalan through a drip – you may have a drop in blood pressure, a skin rash, swelling of the eyelids, face or lips, or wheezing and breathlessness. Let your doctor or nurse know straight away if you have any of these effects

Rare side effects

Fewer than 1 in 100 people have these effects.

- Liver changes that are very mild and unlikely to cause symptoms – the liver usually goes back to normal when treatment is finished, but you will have regular blood tests to check how well your liver is working
- There is a small risk of getting another cancer or leukaemia in the future after treatment with melphalan – remember that the risk is very small compared to the risk to your health of the cancer you're having treatment for
- A blood disorder called haemolytic anaemia
- A skin rash

High dose melphalan

High dose melphalan can cause these side effects in addition to those mentioned above.

- Hair loss occurs in most people having high dose melphalan
- Mouth ulcers
- Severe nausea and vomiting in some people

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 you may develop more side effects 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)



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- Other drugs you are having

Coping with side effects

Talk to your doctor, pharmacist or nurse about all your side effects so 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.

Medicines that may react with melphalan include

- Some other types of chemotherapy – your doctor and pharmacist will know about this
- An antibiotic called nalidixic acid that is used to treat bladder infections
- A drug called ciclosporin

Pregnancy and contraception

Melphalan may have a harmful effect on a developing baby. It is important not to become pregnant or father a child while having this treatment or for a few months afterwards. Talk to your doctor about contraception before starting treatment if there is any chance that you or your partner could become pregnant.

Breastfeeding

Don not breastfeed 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.

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.