

PATIENT INFORMATION ON METHOTREXATE

[Meth-o-TREX-ate]

Brand names:

Oral – Methoblastin

Injectable – Methacord, Methotrexate Accord
& Trexject

This information sheet has been produced by the Australian Rheumatology Association to help you understand the medication that has been prescribed for you. It includes important information about:

- **how you should take your medication**
- **the possible side effects**
- **what tests you will have to monitor your condition**
- **other precautions you should take while you are taking methotrexate.**

Please read it carefully and discuss it with your doctor.

IMPORTANT THINGS TO REMEMBER

- While taking **methotrexate** you should see your rheumatologist regularly to make sure the treatment is working and to minimise possible side effects.
- You should have regular blood tests as directed by your rheumatologist.
- If you are concerned about any side effects, you should contact your rheumatologist as soon as possible.

For more information about inflammatory conditions associated with arthritis, see **Arthritis Australia's website:**
www.arthritisaustralia.com.au

For information on scleroderma, see **Scleroderma Australia's website:**
www.sclerodermaaustralia.com.au

What is methotrexate?

Methotrexate (brand name Methoblastin or injectable methotrexate; Hospira, Methacord, Methotrexate Accord & Trexject) is a well-established, effective treatment for several different types of inflammatory diseases such as rheumatoid arthritis, psoriatic arthritis, Crohn's disease, SLE (Systemic Lupus Erythematosus) and severe psoriasis. It may also be used for other conditions.

It can reduce damage to joints, skin and other tissues so it belongs to the group of medications called **disease modifying antirheumatic drugs (DMARDs)**. It is not a painkiller.

Low dose methotrexate (5mg-30mg once per week) has been used to treat rheumatoid arthritis for more than 25 years. Most, but not all, patients will benefit from this medication. It is also used at very high doses (1000mg-5000mg a day) to treat some cancers.

What benefit can you expect from your treatment?

Methotrexate has been shown to prolong life and can reduce the risk of heart disease in rheumatoid arthritis.

It may be 4 to 12 weeks after reaching the best dose for your condition before you notice any benefits. Many of the conditions that are treated with methotrexate are long term and methotrexate may need to be taken for several years or in some people, indefinitely. Sometimes other DMARDs are taken with methotrexate for added benefit.

How is methotrexate taken?

Methotrexate may be taken by mouth as a tablet or given by injection either into the muscle or under the skin (subcutaneously). For more information on the injections see [Injectable methotrexate](#).

Methotrexate is taken ONCE A WEEK, on the same day each week. If you are taking the tablets, it is a good idea to specify the day of the week that you will take your tablets to avoid making mistakes.

Methotrexate tablets are best taken on an empty stomach. However, if nausea is a problem, taking them at mealtime can help to reduce this side effect and does not reduce the benefits too much.

What is the dosage?

Tablets come in 2.5mg or 10mg strengths. If you have two strengths, ensure you CHECK THE STRENGTH each time you take it. Treatment may start low at 5mg or 10mg a week, increasing to an average dose of 20mg a week, and sometimes 30mg/week.

The dose is usually taken all at once on a single day. It may be divided into separate doses taken during that day if necessary.

If you stop methotrexate treatment for more than a few weeks there is a risk that your condition may worsen. Continue with your treatment unless advised by your doctor or unless side effects develop.

If you have an illness that makes you unwell enough to change plans for the day (e.g. gastroenteritis or fever), it is reasonable to miss the weekly dose until you have recovered.

Can other medication be taken with methotrexate?

In order to reduce side effects, it is recommended that you also take folic acid or folinic acid. Your doctor will explain how much of the folic/folinic acid to take and when to take it.

Methotrexate is often taken in combination with other arthritis medications, including:

- other DMARDs
- biological DMARDs (these act on natural substances in the body that contribute to inflammation and joint damage)
- steroid medications such as prednisolone or cortisone injections into the joint
- anti-inflammatory medications (NSAIDs) such as naproxen (Naprosyn) or ibuprofen (Brufen/Nurofen)
- simple pain medications such as paracetamol.

Are there any side effects?

Some people experience side effects so tell your doctor if you are concerned about possible side effects.

A reduction in dose may minimise these so you may be able to continue it. Your doctor will advise on any dose changes that are necessary.

Most common possible side effects (Folic or Folinic acid helps to reduce side-effects)

- Fatigue, mental clouding, nausea, vomiting or diarrhoea. These can be reduced if methotrexate is taken with food or in the evening. Anti-nausea tablets can be used if needed.
- Mouth ulcers

Less common or rare possible side effects

There are some rare but potentially serious side effects with methotrexate.

- **Skin dryness, a variety of skin rashes and increased sensitivity to the sun** may also occur. You should wear sunscreen and a hat when out in the sun.

- Some people also experience a temporary increase in muscle and joint pain after taking the weekly dose.
- **Blood counts:** Methotrexate may cause a drop in the number of white blood cells, which are needed to fight infection. It can also cause a drop in the number of platelets, which help to stop bleeding.
 - Regular blood tests aim to pick these problems up early if they occur.
 - If you develop a sore mouth, mouth ulcers, easy bruising, nosebleeds, bleeding gums, breathlessness, infection or fever tell your doctor straight away.
- **Hair thinning:** This may occur rarely. It is not permanent and hair will grow back when the medication is stopped.
- **Liver:** Methotrexate can inflame the liver and this can be seen on blood testing. Regular blood tests aim to pick this up early if it occurs. The dose of methotrexate may have to be reduced or stopped if problems occur. Liver problems may be increased when methotrexate is combined with other medications or with heavy alcohol use (see *Alcohol* overleaf).
- **Lungs:** Methotrexate can rarely cause some inflammation in the lungs soon after starting therapy. The small risk is increased if leflunomide (Arava) is also being taken at the same time. The problem may develop quickly, so if you have a sudden onset of breathing difficulties and/or dry cough seek medical attention as soon as possible. There is no evidence that long-term methotrexate causes lung problems such as interstitial lung disease.
- **Nodule formations:** Some people with rheumatoid arthritis develop nodules on their elbows or other pressure points. In some cases, methotrexate may increase this.

Long term side effects:

Methotrexate may be taken for long periods (more than 25 years). The following are rare but possible long-term issues:

- **Liver:** Very rare cases of increased fibrous tissue in the liver have been reported after long-term treatment. This risk is increased when combined with alcohol. Regular monitoring can minimise the risk of this occurring.
- **Cancer:** People who have rheumatoid arthritis and other similar inflammatory conditions have an increased risk of lymphoma (a lymph node cancer). It is not clear whether methotrexate increases this risk further, but any additional risk is likely to

be very small. Methotrexate may also reduce the risk of these cancers by controlling the inflammation. For general cancer prevention, stopping smoking is recommended. An annual skin check to detect any early skin cancer is also recommended.

- *Fertility*: Methotrexate does not affect a person's ability to have children in the long term. See also *Precautions*.

More information about possible side effects

Information that comes with your methotrexate medication describes in detail potential serious side effects that may occur with methotrexate. Many of those side effects relate to **high dose** methotrexate used for the treatment of cancer. These may not be applicable to the much lower doses that are prescribed for the treatment of rheumatoid arthritis.

What precautions are necessary?

Blood tests

- As methotrexate may affect the liver and blood cells, you **MUST** have regular blood tests during your treatment. This is very important, as you may not get symptoms with some of these problems.
- Full blood count and liver function tests will be individualised by your doctor according to your risk.

Risk of infections

Because your immune system may be depressed, there is an increased risk of developing some infections, especially Herpes zoster (chicken pox and shingles).

You should try to avoid contact with people who have these infections. If you have an infection or persistent fever, tell your doctor straight away.

Use with other medications

Methotrexate can interact with other medications. You should tell your doctor (including your GP, rheumatologist and others) about all medications you are taking or plan to take. This includes over the counter, herbal or naturopathic medications. You should also mention your treatment when you see other health professionals.

- Methotrexate can be taken safely with anti-inflammatory drugs (NSAIDs), as long as your kidney function is normal.
- Antibiotics containing trimethoprim (e.g. **Resprim, Resprim Forte, Septrin, Alprim or Triprim**) can cause problems when taken with methotrexate. If you are prescribed any of these medications, you must tell the doctor you are taking methotrexate.

Vaccines

- Most vaccines can be given safely. Current recommendations are that low dose methotrexate (0.4mg/kg per week) is not a contraindication to live vaccines, such as Zostavax, MMR (measles, mumps and rubella), oral polio or yellow fever but such live vaccines should be avoided at higher doses of methotrexate.
- Pneumococcal vaccines and the yearly seasonal flu vaccinations are safe and encouraged.
- For more information on vaccination including the COVID-19 vaccination go to the ARA website <https://rheumatology.org.au/For-Patients/Medication-Information/Vaccinations/Vaccinations-in-Rheumatology>

Surgery

- If low-dose once-weekly methotrexate is continued during surgery, there seems to be no change in wound healing or increased infection.

Use with alcohol

- Alcohol increases the risk of liver damage while taking methotrexate. Methotrexate usage in heavy drinkers has been associated with cirrhosis of the liver.
- It is not known precisely what level of drinking is safe when on methotrexate, however there is general agreement that 1 to 2 standard drinks taken once or twice a week is unlikely to cause a problem.
- Drinking more than 4 standard drinks on one occasion, even if infrequently, is strongly discouraged.

Use in pregnancy and when breastfeeding

- Methotrexate should not be taken during pregnancy as it can cause miscarriage or foetal deformity. It should also not be taken when breastfeeding.
- Women of child-bearing age should use effective contraception.

More detailed information is available at:

<https://rheumatology.org.au/For-Healthcare-Professionals/Clinical-Resources/Pregnancy-Prescribing-Info>

How to store methotrexate

- Store methotrexate in a cool, dry place, away from direct heat and light (e.g. not in the bathroom).
- Keep out of reach of children.

Questions?

If you have any questions or concerns write them down and discuss them with your doctor.

Your doctor's contact details

You should see your rheumatologist regularly to make sure the treatment is working and to minimise any possible side effects.

This Information Sheet has been prepared using materials obtained from various sources which have been reviewed by the Australian Rheumatology Association (ARA). It contains general information only and does not contain a complete or definitive statement of all possible uses, actions, precautions, side effects or interactions of the medicines referenced. This information is not intended as medical advice for individual conditions nor for making an individual assessment of the risks and benefits of taking a particular medicine. Decisions regarding the assessment and treatment of patients are the sole responsibility of the treating medical professional, exercising their own clinical judgment and taking into account all of the circumstances and the medical history of the individual patient.

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