



PATIENT INFORMATION ON

CICLOSPORIN

(Brand names: Cyclosporin, Cicloral, Neoral, Sandimmun)

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

- **how you should take your medicine**
- **what are the possible side effects**
- **what tests you must have to monitor your condition and to detect unwanted effects**
- **other precautions you should take while you are taking ciclosporin.**

Please read it carefully and discuss it with your doctor.

Important things to remember

- While taking ciclosporin you should see your rheumatologist regularly to make sure the treatment is working and to minimise any 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 **RHEUMATOID ARTHRITIS** and other inflammatory conditions see the Arthritis Australia website www.arthritisaustralia.com.au

What is ciclosporin?

Ciclosporin (brand names Cyclosporin, Cicloral, Neoral and Sandimmun) is a medicine used to treat rheumatoid arthritis and other conditions such as systemic lupus erythematosus (lupus/SLE), polymyositis (muscle inflammation), nephrotic syndrome (kidney inflammation) and severe skin conditions like psoriasis, atopic dermatitis (eczema) and pyoderma gangrenosum.

Ciclosporin is used in rheumatoid arthritis when other treatments have been unsuccessful. It is

also used to prevent the rejection of transplanted organs or bone marrow

Ciclosporin is an immunosuppressive medicine, which means that it works by reducing the activity of the immune system. In rheumatoid arthritis, this action helps to reduce inflammation and thus reduce pain and swelling. It also limits damage to the joints and helps to prevent disability in the long term.

Because ciclosporin reduces the damage to the joints, rather than just relieving the pain, it belongs to the group of medicines called **disease modifying antirheumatic drugs (DMARDs)**.

What benefit can you expect from your treatment?

Ciclosporin may be of benefit where other DMARDs have been unsuccessful or have caused side effects.

Improvement in joint pain, swelling and stiffness may be seen after 4 weeks, but may be delayed for up to 4 months. If you stop ciclosporin 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.

How is ciclosporin taken?

Ciclosporin is taken by mouth, either as a liquid or capsules.

Capsules are the most convenient way of taking the medicine. They are available in four different strengths – 10 mg, 25mg, 50mg and 100mg. This means the dosage can be adjusted to suit your needs without you having to take large numbers of capsules.

Treatment is started with a low dose and is then increased depending on how effective the treatment is and whether you have side effects. A usual maintenance dose is 75 mg or 100 mg taken twice daily.

Do not chew the capsules but swallow whole with water.

Cyclosporin may be used with other arthritis medicines including:

- other DMARDs such as methotrexate
- steroid medicines such as prednisolone or cortisone injections into the joint
- anti-inflammatory medicines (NSAIDs) such as naproxen (Naprosyn) or ibuprofen (Brufen, Nurofen).
- simple pain medicines such as paracetamol.

There are separate information sheets for the medicines mentioned above on the ARA website.

Are there any side effects?

You might experience side effects with your treatment. Tell your doctor if you are concerned about possible side effects.

A reduction in the dose may minimise side effects so that you can continue to take the treatment. Your doctor will advise on any dose changes that are necessary.

Most common possible side effects

- Cyclosporin can cause an *increase and darkening of body hair* especially on the face. This can be managed with bleaching or other cosmetic approaches.
- *Bleeding, tender or enlarged gums* may occur but good dental hygiene minimises this effect.
- At the beginning of treatment, a feeling of *pins and needles* or a burning feeling can occur in the hands and feet. There might also be a slight tremor of the hands. These effects tend to lessen after a few weeks and are not serious.
- Cyclosporin can affect your *kidneys* and may increase *blood pressure*. These problems are more common in older people. Kidney function and blood pressure will be monitored regularly. If problems occur, the dose will be reduced or the medicine may be stopped.

Less common or rare possible side effects

- Less common side effects include *skin rash, nausea (feeling sick), vomiting, fever or chills*.
- Cyclosporin can increase the risk of *skin cancers* (see *Precautions* on page 3) and lymphomas (cancer of lymph glands)

- Cyclosporin can increase the risk of *infections*. You should report any infections such as a sore throat or fever to your doctor.
- Rarely, cyclosporin has been found to cause mouth ulcers, diarrhoea, headaches, leg cramps, confusion, weight loss, difficulty breathing, tiredness and swelling of the hands or feet.

What precautions are necessary?

Blood tests

- Since the kidneys, liver and blood pressure may be affected by cyclosporin you **must** have regular blood tests and GP visits during your treatment. This is important as you may not get **symptoms** from blood pressure rising or kidney issues.
- As well as monitoring for side effects, blood tests help to monitor your condition to determine if the treatment is effective.
- Blood tests are recommended every two weeks to begin with. As treatment is stabilised the tests will be done less frequently.
- Your general practitioner (GP) will be informed about the monitoring schedule. It is important to see your GP if you have been asked to do so as they have an important role to play in monitoring your condition.

Use with other medicines and food

- Cyclosporin can interact with other medicines. You should tell your doctor (including your general practitioner, rheumatologist and others) about all medicines you are taking or plan to take. This includes over the counter or herbal/naturopathic medicines. You should also mention your treatment when you see other health professionals.
- If you are taking cyclosporin you should not take St John's wort. This is an ingredient in some complementary medicines recommended for depression, which you can buy without a prescription.
- **You should avoid eating grapefruit or drinking grapefruit juice** while taking this medicine, as it can affect the level of cyclosporin in the body.
- Most vaccines can be given safely with cyclosporin. Talk with your rheumatologist before receiving any vaccines.
- Cyclosporin is often used together with other DMARDs to treat rheumatoid arthritis.

Use in pregnancy and breastfeeding

- Ciclosporin can be used in pregnancy if the mother's condition is serious and no other effective treatment is available. It must, therefore be used with caution.
- You should not breastfeed when taking ciclosporin.
- More detailed information is available at <https://rheumatology.org.au/gps/documents/ARAPregnancyPrescribingGuidanceupdateApr19.pdf>

Skin checks

- When taking ciclosporin, it is important to use a sunscreen and avoid prolonged sun exposure. A yearly skin check is recommended.

How to store ciclosporin

- Ciclosporin capsules and liquid should be stored at room temperature in a dry place, not in the fridge. If liquid ciclosporin is stored in too cool a place, it may become jelly-like. Returning the solution to room temperature can reverse this.
- Keep the capsules in the blister pack until just before you take them. For example, do not take them out of the blister package to put them into a 'dosette' or pill box.
- The solution should be used within two months of opening.
- Keep all medicines 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

If you are taking ciclosporin you should see your rheumatologist regularly to make sure the treatment is working and to minimise any possible side effects

The information in this sheet has been obtained from various sources and has been reviewed by the Australian Rheumatology Association. It is intended as an educational aid and does not cover all possible uses, actions, precautions, side effects, or interactions of the medicines mentioned. This information is not intended as medical advice for individual problems nor for making an individual assessment of the risks and benefits of taking a particular medicine. It can be reproduced in its entirety but cannot be altered without permission from the ARA. The NHMRC publication: *How to present the evidence for consumers: preparation of consumer publications* (2000) was used as a guide in developing this publication.