

Ciclosporin factsheet

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It was first used in dermatology in the early 1980s in the treatment of psoriasis, but it is also used in the treatment of atopic eczema. However, it is not a cure and, because of its side effects, it may not be suitable for everyone. It is available in the UK as capsules containing 10 mg, 25 mg, 50 mg and 100 mg of ciclosporin. A liquid preparation is also available.

How does ciclosporin work?

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Atopic eczema can flare quickly on withdrawal of ciclosporin and for this reason it is best to reduce the dose slowly. Doctors will often recommend switching to alternate-day treatment, then every third day. More potent topical treatments may be introduced as the ciclosporin dose is reduced.

Ciclosporin is not a cure for eczema. Unfortunately, in most cases the eczema comes back again when the treatment is stopped. However, in some cases it remains relatively mild for several months without further

treatment. An added advantage of ciclosporin is a reduction in the need for other treatments such as topical steroids or oral steroids. This reduces the side effects from these other treatments.

What are the side effects?

Ciclosporin does have side effects, which means that it cannot be used for everyone. The side effects of ciclosporin are almost all 'dose-related'. This means that the higher the dose you take, the more likely you are to develop side effects. People will also vary in their susceptibility, so that some develop severe side effects quickly, and others can take ciclosporin for many years without the development of side effects. Most side effects settle when you stop taking the drug, but the longer you take ciclosporin the more severe the side effects will become.

The main side effects of ciclosporin are hypertension (high blood pressure) and reduced efficiency of the kidneys (renal toxicity). Ciclosporin can also increase blood lipids (cholesterol). Therefore, blood pressure and blood tests to look at kidney function and lipid levels need to be checked before treatment and closely monitored throughout treatment. In order to detect any issues quickly.

There is a possible increase in developing certain types of cancer with long-term treatment because of the effect of

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ciclosporin on the immune system. This includes skin cancer, so patients on ciclosporin should take steps to protect their skin from the sun by applying a sunscreen to exposed skin, wearing a hat and seeking shade when outdoors. Female patients are advised to keep up to date with their smear tests. Ciclosporin can also suppress the immune system. This means that the risk of bacterial, fungal and viral infection is greater when you are on this medication.

Despite this drug suppressing the immune system, the risk of contracting minor infections such as colds is probably not increased. If you have not had chickenpox and you come into contact with someone who has chickenpox or shingles (which is also caused by the chickenpox virus), you should inform your doctor promptly as it may be necessary for you to receive preventative treatment to protect you.

Other less serious but troublesome side effects include increased hair growth. This is a relatively common side effect and can be distressing, particularly for women. You may experience swelling and enlargement of the gums, which is usually a problem with higher doses. Nausea, tremor (shaky hands), altered sensation (pins and needles) and headaches can also be a problem.

Despite these side effects, many people find that the resulting benefits from the treatment produce significant relief.

What monitoring is needed?

As possible side effects of ciclosporin include high blood pressure and reduced kidney function, if you are prescribed ciclosporin, your blood pressure and kidney function will need to be checked before treatment and monitored closely throughout treatment.

Kidney function is usually checked using blood and urine tests to measure a substance called creatinine that is removed by the kidneys. Blood and urine tests will usually be taken every 3 months, more frequently at the start of treatment. If there are signs that your blood pressure or kidneys are being affected, the dose of ciclosporin will normally be reduced, or discontinued, and in most cases things will return to normal.

Does ciclosporin affect fertility or pregnancy?

It is preferable not to take ciclosporin during pregnancy, but your doctor will discuss your options. If you are planning a family soon or if you become pregnant while taking ciclosporin, you should discuss this with your doctor straightaway. You should not breastfeed while taking ciclosporin.

Can I drink alcohol while taking ciclosporin?

There is no reason to avoid alcohol (but stay within the recommended guidelines) while taking ciclosporin.

Can I take other medicines at the same time as ciclosporin?

Ciclosporin may be prescribed in combination with other drugs. However, many other drugs interact with it and you should always tell all doctors and medical professionals treating you that you are taking ciclosporin. You should not take over-the-counter or dietary supplements such as St John's wort, without discussing this first with your doctor or pharmacist.

Drugs that may interact with ciclosporin include:

- *Aspirin and non-steroidal anti-inflammatory drugs (NSAIDs):* e.g. ibuprofen and diclofenac.
- *Antibiotics:* e.g. erythromycin, clarithromycin, trimethoprim, ciprofloxacin, rifampicin and doxycycline.
- *Antifungals:* e.g. luconazole, itraconazole, ketoconazole and amphotericin B.
- *Treatments for seizures:* e.g. phenytoin and carbamazepine.
- *Blood pressure medicines:* e.g. ACE inhibitors, beta-blockers and calcium channel blockers.
- *Digoxin.*

Please note: This is not a complete list.

Can I have immunisation vaccines while taking ciclosporin?

You should avoid immunisations containing live weakened viruses (attenuated vaccines) such as polio drops, (measles, mumps and rubella (MMR), yellow fever, chickenpox, shingles and nasal flu vaccines (the annual flu vaccine and pneumococcal vaccines are safe and recommended).

Who is prescribed ciclosporin?

Ciclosporin is licensed for young people 16 years and over and adults with severe eczema. Ciclosporin may also be prescribed and supervised by a dermatologist for the treatment of children with severe eczema.

Ciclosporin cannot be used for milder cases of eczema, as the side effects would be out of proportion to the benefits. Ciclosporin is reserved for people with eczema whose lives are being severely disrupted by eczema and who do not respond successfully to topical treatments (topical corticosteroids, topical calcineurin inhibitors and emollients).

Ciclosporin should not be taken if you have any severe infection (for example, tuberculosis) or any serious form of cancer, or if you have previously had serious cancer. This is because ciclosporin damps down the immune system and so might make these conditions worse or, in the case of cancer, more likely to recur.

Extra care will be required if you have had any previous kidney or liver disorder, high blood pressure, diabetes or high blood cholesterol. In these circumstances, it may not be possible to use ciclosporin.

Before starting ciclosporin, if you are unsure whether you or your child has had chickenpox, a blood test will be required to check for immunity. If necessary, a vaccine against chickenpox will be given.

If you have any questions or concerns, please do not hesitate to speak to a doctor, pharmacist or nurse caring for you.

DISCLAIMER

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