



Azathioprine

Drug information

**Azathioprine
is used to treat
rheumatoid
arthritis, lupus
and other
conditions.**

Azathioprine should help treat your condition. It has been in use for many years and has helped many people. However, as with all drugs some people will have side-effects. This leaflet sets out what you need to know.

What is azathioprine and how is it used?

Azathioprine (trade name: Imuran) is a disease-modifying anti-rheumatic drug (DMARD). It reduces the activity of the body's defence mechanism (immune system), which may be overactive in some conditions. Azathioprine modifies the underlying disease process to limit or prevent tissue damage and disability, rather than having an immediate effect on symptoms.

It's a long-term treatment, so it may be 6–12 weeks before you start to notice the benefits. Unless you have severe side-effects it's important to keep taking azathioprine:

- even if it doesn't seem to be working at first
- even when your symptoms improve (as this will help to keep the disease under control).

Azathioprine is usually initiated by your specialist for people with:

- systemic lupus erythematosus (SLE)
- rheumatoid arthritis
- polymyositis or dermatomyositis
- other autoimmune and inflammatory diseases.

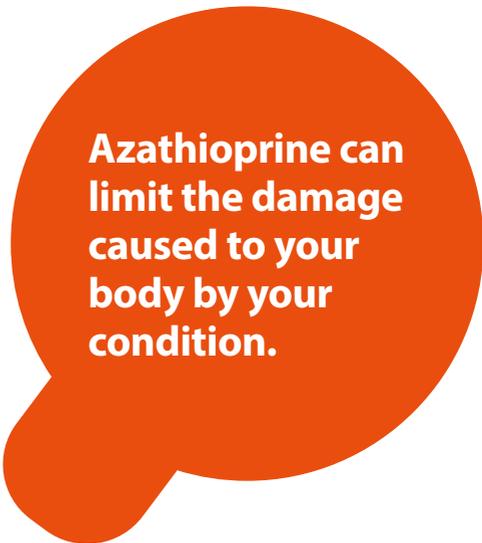
Your doctor may also prescribe azathioprine if you're on steroid treatment so that your steroid dose can be reduced.

Azathioprine may need to be used with caution, in reduced doses if:

- you have severe liver or kidney problems
- you have bone marrow problems.

If you're on other medications which could interact with azathioprine (e.g. allopurinol, warfarin) then your doctor may suggest another treatment or a different dose either of the azathioprine or of your other medication.

Before prescribing azathioprine, your doctor may order a blood test for an enzyme called TPMT (thiopurine s-methyltransferase). This enzyme helps to break down and remove



Azathioprine can limit the damage caused to your body by your condition.

azathioprine from the body. Low levels of TPMT may mean there is a little more risk of side-effects from azathioprine, so your doctor may suggest a lower dose than usual. If the result is very low, azathioprine may not be the right medication for you, and your doctor will discuss other treatments with you.

When and how do I take azathioprine?

Azathioprine is usually given as tablets, taken once or twice daily. It's usually taken with or after food.

Your doctor will advise you about the correct dose, which will depend on your body weight. Usually you'll start on a low dose (e.g. 50 mg per day) and your doctor may increase this if necessary, usually to between 100 mg and 200 mg.

Possible risks and side-effects

As with all medications, azathioprine can sometimes cause side-effects. Azathioprine may cause nausea (feeling sick), vomiting, diarrhoea, loss of appetite (which may be alleviated by taking with food or last thing at night), hair loss and skin rashes. Minor side-effects can sometimes be helped by reducing the dose – speak to your doctor about this.

Because azathioprine affects the immune system, it can make you more likely to develop infections. It can also affect the blood (causing fewer blood



This drug works to halt the disease process itself, rather than just treating symptoms.

cells to be made) or the liver. You'll therefore need to have blood tests before starting azathioprine and at regular intervals while you're taking it. You may be asked to keep a record of your blood test results in a booklet, and you should take it with you when you visit your GP or the hospital.

You must not take azathioprine unless you're having regular blood checks.

You should tell your doctor or nurse specialist straight away if you develop any of the following after starting azathioprine:

- a sore throat, fever or any other signs of infection
- unexplained bruising or bleeding
- yellowing of the skin or eyes (jaundice)
- any other new symptoms or anything else that concerns you.

You should stop azathioprine and see your doctor immediately if any of these symptoms are severe.

You should also see your doctor if you develop chickenpox or shingles or come into contact with someone who has chickenpox or shingles. These infections can be severe in people on azathioprine. You may need antiviral treatment, and you may be advised to stop taking azathioprine until you're better.

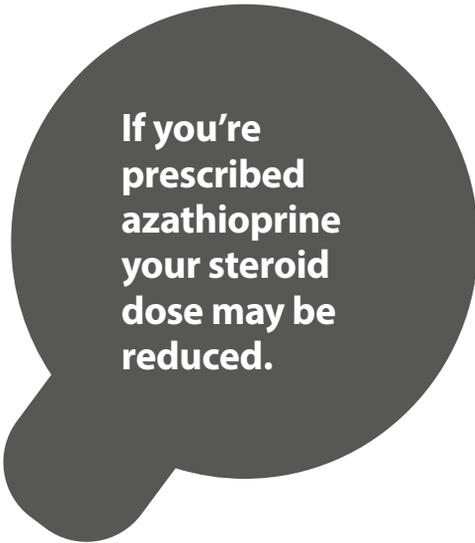
There is possibly a slightly increased risk of certain types of cancer with azathioprine. Some of these may affect the skin and the use of sunscreens is advised. You should discuss this with your doctor or rheumatology nurse if you need reassurance.

Taking other medicines

Azathioprine may be prescribed along with other drugs in treating your condition. However, some drugs can interact with azathioprine (e.g. allopurinol, which is used to treat gout).

Check with your doctor before starting any new medications, and remember to mention you're on azathioprine if you're treated by anyone other than your usual rheumatology team.

- You can carry on taking a non-steroidal anti-inflammatory drug (NSAID) or painkillers if needed, unless your doctor advises otherwise.



If you're prescribed azathioprine your steroid dose may be reduced.

- Don't take over-the-counter preparations or herbal remedies without discussing this first with your healthcare team.

Vaccinations

It's usually recommended that you avoid live vaccines, such as yellow fever, if you're on azathioprine. However, sometimes a live vaccine may be necessary – for example, rubella vaccination in women of childbearing age.

If you're offered shingles vaccination (Zostavax), you should speak to your rheumatology team – you may be able to have the shingles vaccine if you're on a low dose of azathioprine.

Pneumococcal vaccine (which gives protection against the commonest cause of pneumonia) and yearly flu vaccines are recommended.

Alcohol

You should only drink alcohol in small amounts because alcohol and azathioprine can both affect your liver. It's important not to drink more alcohol than the government recommended safe limits – these state that adults shouldn't drink more than 14 units per week. It's also strongly recommended to have alcohol free days without 'saving units up' to drink all in one go. Advice can vary and some rheumatologists may suggest stricter limits. If you're concerned you should discuss your alcohol intake with your rheumatology team.



**Tell a doctor
you're on
azathioprine if
you're prescribed
another drug or
treatment.**

Fertility, pregnancy and breastfeeding

Current guidelines state that azathioprine can be taken during pregnancy at a dose equivalent to 2mg per kilogram or less of your body weight. It's important that the mother's health is maintained during pregnancy and disease flares are avoided by not stopping azathioprine. If you're planning a family or become pregnant while taking azathioprine, you should discuss this with your doctor as soon as possible.

Azathioprine may pass into the breast milk. If you're on azathioprine and wish to breastfeed you should discuss this with your rheumatology team beforehand, although current guidelines now state that it is safe to continue in this instance.

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Please note: we have made every effort to ensure that this content is correct at time of publication, but remember that information about drugs may change. This information sheet is for general education only and does not list all the uses and side-effects associated with this drug.

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