



AZATHIOPRINE

What is azathioprine and how does it work?

Azathioprine has been available for more than forty years. It was developed initially to stop rejection of transplanted organs, such as kidneys, although it is now used to treat a wide range of illnesses. It works by suppressing the body's own defence system (the immune system), either by itself or in combination with other drugs.

Why suppress the immune system?

There are several reasons:

- In *auto-immune* diseases, one or more of the body's organs are attacked by the immune system.
- There are also conditions in which the body's immune system becomes 'overactive' resulting in inflammation, such as atopic eczema.
- After transplant surgery, the immune system has to be suppressed to stop the transplanted organ being rejected.

Which skin conditions are treated with azathioprine?

Azathioprine is used for conditions in which the immune system is too active or is directed against the body's own organs. It is licensed to treat [pemphigus vulgaris](#), systemic lupus erythematosus and dermatomyositis. However, sometimes drugs are used for conditions not included in the original licence application. In the case of azathioprine, these are [atopic eczema](#), [bullous pemphigoid](#), pyoderma gangrenosum, chronic actinic dermatitis and cutaneous vasculitis.

Will azathioprine cure my skin condition?

None of the skin conditions for which azathioprine is used are "cured" by this treatment. Usually a gradual improvement is followed by resolution. However, this may take many years.

How long will I need to take azathioprine?

Azathioprine is usually taken for many months or even years. It is not usually given for short periods as the benefits of treatment are slow to start and may not be apparent for 2-3 months.

When should I take azathioprine?

Azathioprine is taken either once or twice a day, with or after food.

What dose should I take?

Your doctor will advise you. Azathioprine is usually taken as a tablet, and doses fall within the range of 50-250 mg per day. The dose prescribed for you will depend on your weight and on the results of blood tests carried out before you start treatment and as part of the regular monitoring of your blood during treatment.

What are the possible side effects of azathioprine?

Most patients have few or no side effects. However, potential side effects include nausea, diarrhoea, and loss of appetite. Azathioprine can affect the bone marrow (where the blood is made), which may cause anaemia, a low white cell count (which carries an increased risk of infection) and a low platelet count (giving an increased risk of bruising and bleeding). Flu-like symptoms, sore throats, mouth ulcers, bleeding and bruising should be reported to your doctor promptly. Azathioprine can also impair the functioning of the liver.

Taking azathioprine for a number of years may increase your risk of getting some types of cancer, including skin cancer, although this is not quantifiable. It is advisable for those taking azathioprine to protect themselves from undue sunlight exposure by modifying their behaviour, wearing suitable clothing and using appropriate sunscreens (with a sun protection factor of at least 30).

Azathioprine can make you more prone to infections. If you have not had chicken pox but have come into contact with a person with chicken pox or shingles, you should go to your doctor straight away as you may need special preventative treatment. You should not be given "live vaccines", such as oral polio, BCG and rubella (German measles), while you are on azathioprine. Inactivated rather than oral polio vaccine should also be used for other members of your household. Influenza and pneumococcal vaccines, however, are safe and can be recommended. If you need any [immunisations](#) it is important that you inform the staff providing these that you are taking azathioprine.

How will I be monitored for the side effects of azathioprine treatment?

Blood tests (to check the blood count and liver function) will be carried out weekly until a maintenance dose has been reached. After that, blood tests will be less frequent, falling to a minimum of once every three months while treatment

continues. It is important that you ensure you attend for your blood tests as advised by your doctor.

Does azathioprine affect fertility or pregnancy?

You should not normally take azathioprine if you are pregnant. You should discuss this with your doctor as soon as possible if you are planning a family, or become pregnant while taking azathioprine. You should not breastfeed if you are taking azathioprine.

May I drink alcohol while taking azathioprine?

Yes, within reasonable limits.

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

Some drugs interact with azathioprine and care should be taken. These include allopurinol, warfarin, ACE inhibitors (angiotensin converting enzyme inhibitors), co-trimoxazole and sulphasalazine. You should always tell any doctor or pharmacist treating you that you are on azathioprine. Similar caution must apply to drugs sold over the counter and to some herbal remedies; however, many drugs can be taken safely with azathioprine.

Where can I find out more about azathioprine?

If you want to know more about azathioprine, or if you are worried about your treatment, you should speak to your doctor or pharmacist. This information sheet does not list all of the side effects of azathioprine. For full details, look at the drug information sheet which comes as an insert with your prescription for azathioprine.

This leaflet aims to provide accurate information about the subject and is a consensus of the views held by representatives of the British Association of Dermatologists: its contents, however, may occasionally differ from the advice given to you by your doctor.

**BRITISH ASSOCIATION OF DERMATOLOGISTS
PATIENT INFORMATION LEAFLET
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