



AZATHIOPRINE

What are the aims of this leaflet?

This leaflet has been written to help you understand more about azathioprine. It tells you what it is, how it works, how it is used to treat skin conditions, and where you can find out more information about it.

What is azathioprine and how does it work?

- Azathioprine has been available since the 1960s and was initially developed to stop the body from rejecting transplanted organs, such as kidneys.
- It is now also used to treat a wide range of illnesses.
- It works by suppressing the body's own immune system, either by itself or in combination with other drugs.
- Azathioprine is not a steroid and is considered to be safer for longer term use than high doses of steroid tablets.

Which skin conditions are treated with azathioprine?

- Azathioprine is used to treat a number of inflammatory skin conditions.
- Azathioprine is licensed to treat [pemphigus vulgaris](#), systemic lupus erythematosus and [dermatomyositis](#).
- Azathioprine is commonly used off-license to treat several conditions including [atopic eczema](#), [bullous pemphigoid](#), [pyoderma gangrenosum](#), [chronic actinic dermatitis](#) and cutaneous vasculitis.

How long will I need to take azathioprine?

- Azathioprine is usually taken for many months or years.
- After starting treatment, a gradual improvement will be seen, but this can take 2 to 3 months.

- If there is no improvement after several months, then your doctor may consider an alternative treatment.

When should azathioprine be taken?

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

What dose should be taken?

- Azathioprine is usually taken as a tablet.
- Before starting azathioprine, the specialist will need to carry out a blood test to find out if there is enough activity of an enzyme in your body called thiopurine methyltransferase (TPMT) which is needed to process the drug.
- The dose prescribed for you will depend on your weight and on the results of blood tests prior to starting treatment.
- A smaller dose will be prescribed at first and this will be adjusted according to how the body responds to treatment and any unwanted effects that might be experienced.

What are the possible side effects of azathioprine?

- Most patients tolerate azathioprine well and do not experience any unwanted effects.
- The most common side effect is nausea which sometimes occurs when starting azathioprine or following an increase in dose. This usually goes away after a few weeks. Occasionally some people have severe nausea and, in this case, the doctor may lower the dose or prescribe anti-sickness medications.
- Azathioprine can affect your liver and bone marrow. You will need to take regular blood tests so the doctor can monitor the liver function.
- Rarely, patients may be allergic to azathioprine. This can cause severe flu-like symptoms, a rash, muscle or joint pains. If at any point you develop these symptoms stop the drug and contact your doctor as soon as possible.
- Taking azathioprine may slightly increase your risk of infections. If you become unwell you should see your doctor who may check your blood tests and treat the infection as appropriate. Your doctor may advise stopping azathioprine for a short period until the infection has cleared.
- Taking azathioprine for a number of years may possibly increase your risk of getting skin cancer and a type of blood cancer called lymphoma.

You should protect yourself from too much sunlight exposure by not sunbathing, wearing suitable clothing (e.g. long sleeves and sunhat) and using sunscreens with a sun protection factor (SPF) of at least 30 and a star rating of at least 4. Please visit www.bad.org.uk for further advice on how to protect your skin from the sun . If you detect any new swellings or lumps, or changes in your skin, which last more than two weeks, you should inform your doctor as soon as possible.

Azathioprine and vaccinations

- The 'live' vaccines such as MMR (measles, mumps, rubella), polio, chicken pox/shingles and yellow fever are no longer considered inappropriate for people taking azathioprine. This means that you may be able to have these vaccines. However, the guidelines advise that your suitability for these vaccines should be decided by your doctor on an individual basis.
- If you have never had chickenpox the doctor may recommend vaccination against this before starting azathioprine. If this was not possible and you have never had chickenpox or shingles but have come into contact with a person with either of these problems whilst you are taking azathioprine, then you should see your doctor straight away as you may need special preventative treatment.
- Yearly flu/influenza vaccines, all Covid-19 vaccines available at the time of writing in 2021, and 5 yearly pneumococcal vaccine are safe and should be given to everybody on azathioprine.
- For more information, see the Patient Information Leaflet on [Immunisations](#).

What monitoring will be required?

- Your doctor will arrange for you to have regular blood tests to monitor your liver and bone marrow function whilst you are taking azathioprine.
- You should seek urgent medical attention if you develop a high fever, severe flu-like illness, unexplained bruising/bleeding or yellowing of the skin as these may indicate a serious side effect of azathioprine.

How frequently will blood tests be needed?

- You will require blood tests once a week for the first month of treatment and then bloods test once a month.
- Once you are stable on a fixed dose of azathioprine you will require blood tests every 3 months.

Is azathioprine safe in pregnancy, during breastfeeding or if my partner and I are trying for a child?

- If you are pregnant, planning to become pregnant or breastfeeding this should be discussed with your doctor before taking this medication.
- There is no definitive evidence that azathioprine is harmful in pregnancy however, some studies have shown an association with premature birth and small-for-date babies.
- Prescribing azathioprine in pregnancy requires careful consideration and may only be justified in those with severe disease particularly where there is no safer alternative treatment.
- Azathioprine does not affect sperm quality or male fertility.

Can I drink alcohol while taking azathioprine?

- Alcohol can safely be consumed whilst taking azathioprine however, it is advisable to keep alcohol consumption to a minimum as both alcohol and azathioprine can affect the liver.
- The national guidelines for safe consumption advise that men and women should not drink more than 14 units a week.

Can other medicines be taken at the same time as azathioprine?

- Before you are given azathioprine your doctor will ask you to list all medicines that you are taking as some medicines can interact with this medication.
- Allopurinol and febuxostat (for gout) should not be taken together with azathioprine.
- Care should be taken if certain other drugs are used together with azathioprine. These include warfarin, ribavirin, co-trimoxazole, ACE inhibitors (angiotensin-converting enzyme inhibitors) and trimethoprim.
- Always tell any doctor treating you that you are taking azathioprine.

Where can more information about azathioprine be found?

- If you want to know more about azathioprine, or if you are worried about your treatment, you should speak to your prescribing doctor or pharmacist.
- This information sheet does not list all the unwanted effects of azathioprine.

- For full details, read the drug information sheet which comes as an insert in the azathioprine package.

References:

[British Association of Dermatologists' guidelines for the safe and effective prescribing of azathioprine 2011](#) (NICE accredited)

Web link to detailed leaflet:

<http://www.medicines.org.uk/emc/medicine/29120>

For details of source materials used please contact the Clinical Standards Unit (clinicalstandards@bad.org.uk).

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: individual patient circumstances may differ, which might alter both the advice and course of therapy given to you by your doctor.

This leaflet has been assessed for readability by the British Association of Dermatologists' Patient Information Lay Review Panel

BRITISH ASSOCIATION OF DERMATOLOGISTS

PATIENT INFORMATION LEAFLET

PRODUCED JUNE 2007

UPDATED MAY 2010, MARCH 2013, AUGUST 2016, SEPTEMBER 2021

REVIEW DATE SEPTEMBER 2024