



Azathioprine For Uveitis

What is Azathioprine?

Azathioprine is an immunomodulatory drug. It is used to treat autoimmune conditions which include uveitis, lupus, rheumatoid arthritis, Crohn's disease. It is also used as an immunosuppressant drug in organ transplant to prevent rejection of the transplanted organ. In the eye clinic, it is prescribed to treat inflammation and maintain vision.

Azathioprine and uveitis

Uveitis is an inflammation of the uvea, the middle layer of the eye, which can lead to vision loss if untreated. Azathioprine works by interfering with the production of certain cells in the body that mediate inflammation. Though it takes a few weeks to months to have an effect, it has found to be moderately effective in controlling inflammation in the eyes.

How to take Azathioprine?

Always read the patient information leaflet (PIL) that comes with the medication.

- **Dosage:** Take Azathioprine exactly as prescribed by your doctor, which is once or twice daily. The dose is dependent on how much you weigh. The dose can vary from a daily dose of 25mg to 150mg. This can be as a single dose or divided into two doses. You will be started on a low dose which will be increased after 2 weeks depending on your tolerance of the drug and your blood test results.
- **Administration:** Always take this medicine exactly as your doctor has told you. These tablets are to be taken orally and may be taken with food or on an empty stomach. These tablets should be taken at least 1 hour before or 2 hours after milk or dairy products. Swallow the tablets whole with a glass of water. Do not crush or chew them.
- **Missed Dose:** Take it as soon as you remember unless it is time for your next dose. **If you miss a dose do not take a double dose to make up for a forgotten dose.**

- **Storage:** Keep this medicine out of the sight and reach of children. Do not use this medicine after the expiry date which is stated on the carton and blister after “EXP”. The expiry date refers to the last day of that month. Do not store above 25°C and protect from light.

How long will it take for it to start working?

Azathioprine may not start to work right away, so it is important to continue taking it even if it does not seem to work at first. You should continue taking it as prescribed when your symptoms improve to keep your condition under control and prevent your symptoms from coming back.

What are the possible side effects?

Like all medications, Azathioprine can cause side effects, but they are usually mild and vary from person to person. Side effects are more likely during the first six weeks as your doctor gradually increases the dose.

Side effects:

- Reduction in your white blood cell counts which can increase your risk of infection.
- Liver function can be affected which will require monitoring.
- Reduction in your platelet counts which if not monitored can increase the risk of bleeding or bruising.
- One notable side effect of azathioprine is its impact on urine colour. You could experience fluorescent or bright yellow urine, particularly the first urine of the day. While this may be alarming, it is not uncommon and is due to the concentration of the medication in the body. It is important to monitor any changes in urine colour and inform us if there are concerns or if other symptoms accompany the colour change.

Less common side effects:

- Nausea – this can be relieved by taking tablets after meals.
- Hair loss
- Anaemia – due to a reduction in your red cell count or haemoglobin.
- Sensitivity to light – avoid sunbeds. Wear SPF 30+ and above and wear loose clothing covering your hands/legs and wear a hat when out in the sun.
- Skin rash

Rare but serious side effects

Some people can have serious side effects when taking Azathioprine.

Stop taking the medicine and speak to a doctor or call 111 now if:

- you feel tired all the time, dizzy or sick, or you are vomiting or have diarrhoea.
- you have a high temperature with shivering or chills, cough or a sore throat.
- your joints or muscles are hurting.
- your urine changes colour or you start passing urine more or less than usual – this can be a sign of kidney problems.
- you feel confused, light-headed or weak – these can be signs of [low blood pressure](#)
- you are bleeding or bruising more easily than usual.
- you notice lumps anywhere on your body.
- you have severe stomach ache (abdominal pain) and back pain.

Taking azathioprine with other medicines

Azathioprine can react with certain medications such as allopurinol and warfarin. Please let us know if you are already taking these medications or if you get prescribed these drugs.

Remember to mention you are on Azathioprine to any health professional you are treated by. Please inform us if you prescribed any new medication or treatment by another health care professional.

You can take paracetamol and ibuprofen when needed unless there is another reason not to take them.

Do not take other over-the-counter preparations or herbal remedies without discussing with your doctor, as some of them could react with azathioprine to cause side effects or reduce the effectiveness of the drug.

You can also use the following link to check if any drug that you are currently taking interacts with Azathioprine to produce an adverse effect:

<https://bit.ly/4dqeROw>

Alcohol

Alcohol and azathioprine both affect the liver. Ensure you do not drink more than the recommended national guidelines. This is drinking less than 14 units per week for both men and women, spread over 3 days or more.

You can find more about alcohol guidelines at <http://www.drinkaware.co.uk/>

Fertility, pregnancy, and breastfeeding

If you are planning to become pregnant or start a family while taking azathioprine, discuss with your doctor as soon as possible.

Current guidelines say that azathioprine can be taken when trying for a baby, when pregnant, and when breastfeeding.

It is fine for men as well to continue taking azathioprine when trying for a baby.

Vaccinations

While taking Azathioprine, your immune system is weaker, which means some vaccines may not work as well, and **live vaccines** should be avoided. Live vaccines contain weakened viruses that could cause infection in people with weakened immune systems.

Live vaccines to avoid include:

- Measles, Mumps, and Rubella (MMR)
- Varicella (Chickenpox)
- Shingles (Zoster)
- Yellow Fever
- Oral Polio Vaccine
- Bacillus Calmette-Guérin (BCG) for tuberculosis
- Live Influenza (nasal spray)
- Rotavirus

Stay away from anyone who has had the live oral polio vaccine for 6 weeks.

The pneumococcal vaccine (that protects against the common type of pneumonia), the yearly flu vaccine, and the COVID vaccine are perfectly safe to have when you are on Azathioprine. It is recommended to get these vaccinations to reduce the risk of infection.

When you are taking Azathioprine, you are eligible to have the non-live shingles vaccine called Shingrix. Please speak to your GP about this.

Having surgery

Please inform us if you are due to have surgery, Azathioprine may need to be paused temporarily to aid in recovery and wound healing.

Preventing Infections

Since Azathioprine weakens the immune system, it is important to take extra precautions to reduce your risk of infections:

- **Avoid close contact with sick people**, especially those with colds, flu, or other contagious illnesses.
- **Wash your hands regularly** with soap and water or use hand sanitizer when soap is not available.
- **Keep your environment clean**, including frequently touched surfaces like phones, keyboards, and door handles. Keep your bathroom, toilet and kitchen surfaces clean.
- **Practice food hygiene** - avoid undercooked meat, unpasteurised milk and raw seafood. If you eat out at restaurants and use takeaways, ensure they practise meticulous hygiene.
- **Wear a mask in crowded places** if there is a high risk of infection.
- **Viral infections** - If you come into contact with anyone who has a viral infection like chicken pox, please see your GP. You will be prescribed anti-viral treatment as a precaution. Please pause the Azathioprine while you are taking the anti-viral medication.
- **COVID** - If you test positive for COVID, then you are eligible for COVID antibody treatment. This treatment is only effective when given within 5 days of testing positive. The best way to access treatment is to contact 111 and follow their advice. Please pause the Azathioprine while you are receiving the antibody treatment.
- **Antibiotics** – If you are prescribed antibiotics by your GP or other health care professionals to treat infections, you may have to pause the **Azathioprine** for the duration of the antibiotic course. Please seek advice from the health care professional prescribing the medication or contact us for advice. Pausing the **Azathioprine** can give your immune system a chance to fight the infection and for the antibiotics to take effect.
- **Seek medical advice if you develop a fever, persistent cough, or any signs of infection.**

Screening, monitoring and follow-up

Azathioprine may not be suitable for everyone. Before starting you on azathioprine, your doctor will order a blood test called TPMT. If your TPMT levels are very low, Azathioprine may not be the right option for you, and alternative medication will be discussed with you. Other reasons for not starting azathioprine are severe kidney or liver problems, bone marrow problems, and repeated infections.

Prior to starting treatment, you will have blood tests and a chest x-ray to check if the drug is suitable for you and that you do not have an active infection. This will ensure safety of your health and effectiveness of the drug. You will have had most of the tests done at your initial appointment.

Regular follow-up appointments are essential to monitor your body's response to Azathioprine and to adjust dosages if necessary. Blood tests will be performed periodically to check for side effects and ensure the medication is working effectively.

Blood tests will include a full blood count, kidney and liver function tests. The frequency of the tests is fortnightly for the first 6 weeks, then monthly for the next 3 months and then 3 monthly. These tests can be arranged at the eye clinic or with your local GP surgery or hospital.

You will be prescribed a 3 month's supply of Azathioprine. Please inform us via the contact details provided at the end of this leaflet when you have 2 weeks of medication left so we can prescribe the medication without any delay. We cannot prescribe Azathioprine without a recent blood test. So please ensure you have regular blood tests for your safety.

You will be on treatment for a minimum of 2 years and more depending on how stable the inflammation in your eyes is.

Available support and resources

<https://www.versusarthritis.org/about-arthritis/treatments/drugs/azathioprine/>

<https://bit.ly/4kh968v>

<https://www.rnib.org.uk/your-eyes/eye-conditions-az/uveitis/>

Contact information: weekdays excluding bank holidays

Uveitis email address: uveitis@uhb.nhs.uk (08:00 – 17:00)

Jacqui Orpe, secretary: 0121 371 6905
(Monday, Tuesday, Friday)

Carolyn Rivera, specialist nurse: 07823 827040
(08:00 – 17:00, Monday, Tuesday, Thursday, Friday)

Hermy Skew, specialist nurse: 07388 711893
(08:00 – 17:00, Tuesday, Wednesday, Thursday, Friday)

Main ophthalmology outpatient clinic: 0121 371 6476, 0121 371 6477
(08:00 – 18:00, Monday to Friday)

Appointments team: 0121 371 6925, 0121 371 6787
(08:00 – 16:00, Monday to Friday)

Hospital Pharmacy: 0121 371 5479, 0121 371 5480

Homecare pharmacy (deliveries): 0121 371 3933

Out of hours: we do not provide an out of hours service.

In cases of emergency such as:

- sudden drop in vision
- sudden appearance of or increase in floaters (dots floating across your field of vision)
- flashing lights
- redness in the eye with severe pain and sensitivity to light
- appearance of a shadow or curtain across your vision with a drop in vision

Please contact or visit your local eye casualty.

If you are a Birmingham resident, your local eye casualty is BMEC (Birmingham Midland Eye Centre). Please note that the average wait time can range from 2 hours to 6 hours.

Address: City Hospital, Dudley Rd, Birmingham B18 7QH.

Phone number: 0121 5076779

Opening hours:

8:30am – 7pm, Monday to Friday

9am – 7pm – Saturday

9am – 6pm – Sunday

Accessibility

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