

Information on Azathioprine for Inflammatory Bowel Disease

What is Azathioprine?

Azathioprine belongs to a group of medicines called immunosuppressant(s).

What is Azathioprine used for?

Azathioprine is used to dampen down the body's immune system (this is known as an immunosuppressant) and can be used in several different conditions.

Azathioprine has been shown to be beneficial in the management of inflammatory bowel diseases (IBD) like Crohn's Disease and Ulcerative Colitis. This leaflet aims to tell you more about Azathioprine.

What does the immune system do?

The body's immune system recognises and protects the body from bacteria, viruses and other foreign substances. Occasionally the immune system attacks normal healthy tissues instead.

The immune system is made up of different types of white blood cells. Azathioprine works by decreasing the number of one of the types of white blood cells produced; called lymphocytes. The white blood cells are necessary to fight viral infections and are involved in the inflammation process in inflammatory bowel disease (IBD), inflammation occurs in Crohns Disease and Ulcerative Colitis.

Aim of the treatment

The aim of the treatment is to reduce the inflammation by lowering the number of lymphocytes produced to a lower than normal level. The other type of white blood cells produced are called neutrophils, these also help fight bacterial infections.

The treatment does not aim to reduce the number neutrophils produced or to affect any other component of the blood but sometimes this can happen.

During treatment with an immunosuppressant the body can be more susceptible to infection but if the white blood cell levels are monitored carefully (see "How the treatment be monitored?") this rarely causes a problem. Children who are only on one immunosuppressant like azathioprine are not at risk of infection in the same way as people taking immunosuppressant treatment for cancer.

How is it taken?

Azathioprine is usually taken in tablet or syrup form. The amount required will be prescribed by the consultant who calculates the dose required according to the child's body weight. Azathioprine is normally best taken once a day in the evening before bedtime.

How long will it take for the Azathioprine to work?

It can take up to 6 weeks before it begins to work, and the full benefit may take approximately 3 months.

How long will Azathioprine need to be taken?

The benefits of taking Azathioprine will be very closely monitored and will probably need to be taken for two years or more.

What are the benefits of taking Azathioprine?

It is hoped that by taking Azathioprine there will be less 'flare ups' of the disease. A 'flare up' is when symptoms of the disease reoccur.

Are there any side effects?

Remember all medicines affect people in different ways. It is very possible that none of the side effects mentioned here will be experienced. However, the possible side effect of any medication needs to be balanced against the risk of problems if the disease is not treated properly.

Common side effects:

- ❖ Diarrhoea
- ❖ Nausea
- ❖ Mild aches
- ❖ Pains may occur initially, but these should settle within a couple of weeks.

Less common side effects:

- ❖ Symptoms of dizziness
- ❖ Vomiting
- ❖ Fever
- ❖ Shivering
- ❖ Muscle pains or joint pains
- ❖ Skin rashes

If your child should experience any of these symptoms, please contact a member of the children's gastroenterology team or Children's Assessment Unit (CAU) immediately as it may indicate that Azathioprine can not be tolerated

Rare side effects:

- ❖ Decreased production of the white blood cells
- ❖ Decreased platelet count (platelets are a component of the blood which helps with the clotting process of the blood)
- ❖ Increased susceptibility to infections

- ❖ Damage to the liver which may cause jaundice (yellowing of skin and eyes)
- ❖ Inflammation of the pancreas
- ❖ Increased sensitivity to sun light
- ❖ Loss of hair

How to know if there may be side effects from taking Azathioprine?

Any unexplained bruising, bleeding or if a rash develops that looks like purple spots, severe sore throat, multiple mouth ulcers, high temperatures, feels very tired or unwell or appears to have an infection, these symptoms must be reported to a member of the children's gastroenterology team. If unavailable then contact the CAU, contact details at the bottom of this leaflet.

How will the treatment be monitored?

Regular blood tests will be taken to monitor for any side effects. A member of the children's gastroenterology team or pharmacist will inform you if it is not safe to continue taking Azathioprine or if any change in dose is needed.

How often are the blood tests taken?

Before starting Azathioprine, a blood test will be done to confirm that Azathioprine is safe to be taken.

For the first eight weeks a blood test will be taken every two weeks then every three months thereafter. However, the interval of blood tests may vary according to any changes in the condition.

Eight weeks after starting azathioprine an additional blood test will be taken to ensure that the correct dose of the medication is being given.

If an increase in the dose occurs monitoring will revert to the initial blood monitoring.

Blood tests can be taken at the hospital or at the family doctors although this may need to be arranged in advance.

Other things to be aware of:

Chicken Pox, Shingles, Pneumonia and Measles

Because the immune system is suppressed whilst taking Azathioprine medication chicken pox, shingles, pneumonia, and measles can be more severe, therefore should the child be in contact or contract with any of these infections please contact a member of the children's gastroenterology team or CAU immediately for advice.

Sun protection

When taking Azathioprine, the skin may be more sensitive to sunlight and on very rare occasions may lead to skin cancer, therefore it is important to minimise the exposure to strong sunlight and use a high protection factor sunscreen (SPF 30 or above).

Pregnancy

A reliable form of contraception must be used to prevent a pregnancy whilst taking Azathioprine as it can cause damage to an unborn baby. If pregnant or planning a pregnancy or if a parent or carer are pregnant or breast feeding and are administering the medication, please contact a member of the children's gastroenterology team or CAU for advice.

Vaccinations

Please discuss any vaccinations required with a member of the children's gastroenterology team **before** administration as the immune system is suppressed and on occasions can cause a severe reaction. No 'live' vaccines must be given while on azathioprine.

However, it is recommended that the annual influenza vaccine (flu vaccine) is given, and this can be arranged through the family doctor. It is important to have the injection and not the nasal spray, because the spray is 'live'.

Other medicines

Check with a member of the children's gastroenterology team or pharmacist before taking new medicines (including complimentary or herbal medicines) to ensure the combination is safe.

Why is this therapy better than taking steroids?

Although the potential side effects of Azathioprine can appear frightening, steroids also have long-term side effects. The blood test monitoring ensures that for the majority of patients Azathioprine is a safe and effective therapy.

General Points

- ❖ Keep all medicines in a safe place where children cannot reach them
- ❖ Please check the expiry date of Azathioprine liquid suspension as it only lasts for a short period of one month.
- ❖ Azathioprine must be stored at room temperature, away from direct sunlight and heat.
- ❖ If you need to cut or crush the tablets you must always wear rubber gloves used specifically for the handling the medication.
- ❖ Whenever possible avoid touching the medication, if contact occurs wash your hands thoroughly with soap and water.
- ❖ If vomiting occurs, please flush the contents where possible into the toilet and wash hands thoroughly with soap and water.
- ❖ For further information see leaflet "Advice for the Safe Handling and Disposal of Cytotoxic Medicines (Liquids) by Patients and their Carers in the home".

An initial prescription for the Azathioprine medication may be issued by the hospital, thereafter prescriptions can be obtained from family doctor. It is important to ensure that you **always** have sufficient supply of medication as

the treatment must not be stopped abruptly unless under medical/pharmacist advice. If the medication is no longer required or the date has expired, please return to the pharmacist. Do not flush down the toilet or throw away.

How to contact a member of the Children's Gastroenterology Team if you have any queries or concerns

The members of the children's gastroenterology team are available Monday – Friday between 09.00 – 17.00 hours on the following numbers: -

Children's Gastroenterology Specialist Nurse	01603 286320
Paediatric Consultant - via secretary`	01603 287174

Open Access to the Children's Assessment Unit (CAU): Tel No: 01603 289774

If unable to contact a member of the children's gastroenterology team open access to CAU is available for advice or assessment if there are any concerns during the first four months of starting Azathioprine treatment.

