# Azathioprine for interstitial lung disease (ILD)

This factsheet contains useful information about the medicine azathioprine. It explains what interstitial lung diseases (ILDs) are, how azathioprine is used to treat some ILDs and the common side effects of taking the medicine. We hope it will help to answer some of the questions you may have. If you have any further questions or concerns, please speak to your doctor, nurse or pharmacist.

## What is interstitial lung disease (ILD)?

ILD is an umbrella term for a number of different types of diseases that can affect your lungs. ILDs can cause scarring in your lungs, inflammation in your lungs or a combination of both. If your ILD mainly causes inflammation, we may prescribe you immunosuppressant drugs (drugs that reduce the strength of the body's immune system), such as azathioprine. Other medications that can be used to treat ILDs include corticosteroids (prednisolone), mycophenolate and methotrexate.

## What is azathioprine?

Azathioprine is an immunosuppressant drug that is used to control your body's immune system in conditions where it is overactive and causing harm. It is used to treat a wide range of ILDs, including:

- hypersensitivity pneumonitis (HP)
- connective tissue disease associated interstitial lung diseases (CTD-ILD), such as rheumatoid arthritis, lupus, Sjögren's syndrome and anti-synthetase syndrome

If left untreated, inflammation in the lungs may develop into permanent scarring or pulmonary fibrosis. Azathioprine helps to control the inflammation and protects your lungs from ongoing damage, but it may not improve your symptoms (breathlessness and a cough).

Please note that it may take up to three months for you to experience any benefit from taking azathioprine. Your symptoms and lung function tests will be monitored, and you may need a CT scan (a type of scan that uses x-rays to produce detailed images of the inside of the body) to assess your response to the medication.

# How to take azathioprine

- Azathioprine is usually taken once a day in the morning and is best taken after food.
- The tablets should be swallowed whole with a glass of water. Do not crush or chew them.
- It is important that you handle the tablets as little as possible.

#### **Dose to take**

Your doctor will prescribe the most appropriate dose for you. You will usually be started on a low dose to reduce the risk of developing any side effects. If you tolerate the medication well, the dose may be increased by your doctor.

It may take 6 to 12 weeks before you feel any benefit from taking azathioprine. Do not stop taking the medication unless you experience severe side effects. Even when your symptoms start to improve, make sure you continue taking the medication, as it will help to keep the disease under control.

## What to do if you forget to take your medication

- Never take two doses at once.
- If you forget to take your azathioprine, take it as soon as you remember. However, if it is within 12 hours of the next dose being due, miss the first dose and only take the next dose at the usual time.
- Contact your doctor or pharmacist if you are unsure of what to do.
- If you take more tablets than you have been told to take, please contact your doctor immediately.

#### Side effects

Azathioprine has been used for many years and most people do not develop any problems. However, it can occasionally cause some side effects.

The most common side effects are:

- loss of appetite
- nausea (feeling sick)
- headaches

Other possible minor side effects are:

- muscle and bone pain
- diarrhoea (loose stools)
- abdominal pain

If you experience any of the minor side effects listed above, please speak to your doctor or ILD clinical nurse specialist as soon as possible.

Potentially serious side effects are:

- fever or infections
- kidney problems (these may cause a change in the colour of your wee or the amount of wee you pass)
- unexpected bleeding or bruising
- jaundice (yellowing of the skin and the whites of eyes)
- rash, blistering of skin or peeling of skin

If you experience any of the potentially serious side effects listed above, please stop taking azathioprine and seek urgent medical attention from your GP or your nearest emergency department. Please also contact our ILD clinical nurse specialist to inform them of your reaction to azathioprine.

### Less common side effects

Some people may be allergic to azathioprine. This can cause flu-like symptoms, such as severe aches and pains, a fever, shaking, chills and a skin rash. If this happens, you should stop taking azathioprine immediately and inform your GP and ILD clinical nurse specialist.

Although it is rare, there is a slightly increased risk of cancer in people taking azathioprine. Due to this risk, you should always make sure you protect your skin. This includes:

- not sunbathing
- wearing suitable clothing (such as long sleeves and a sun hat)
- using sunscreens with a sun protection factor (SPF) of at least 30 and a star rating of at least four

If you notice any new swellings or lumps on your body, or changes in your skin that last more than two weeks, you should inform your GP immediately. For further advice on skin care and the sun, please visit **www.skinhealthinfo.org.uk** 

Azathioprine may also cause hair loss or thinning of your hair. Hair growth usually returns to normal even if you continue treatment with azathioprine. As your hair will be weaker for the first few months on azathioprine, we advise that you avoid hair dyes or perms during this time.

For the full list of potential side effects that may occur with azathioprine, please read the leaflet supplied with your medicine.

## Infections

Azathioprine can increase your risk of infection. Stop taking azathioprine and tell your doctor or ILD clinical nurse specialist immediately if you develop any of the following:

- a sore throat
- a fever
- any other symptom of infection
- unexplained bleeding or bruising
- any other new symptom that concerns you

#### Chickenpox

You should see a doctor immediately if you come into contact with someone who has chickenpox or shingles, especially if you have never had chickenpox or not had a chickenpox vaccination. These infections can be more severe if you are taking azathioprine and you may require antiviral treatment.

#### **Vaccinations**

As azathioprine suppresses (weakens) your immune system, you should not have any live vaccinations, such as the shingles or yellow fever vaccine. Having live vaccines while you are on azathioprine may cause an infection and the vaccine may not work properly.

Please discuss vaccinations with your doctor, as some are safe and recommended, such as the Pneumovax and flu vaccinations.

#### **Blood tests**

Regular blood tests are important while taking azathioprine, to check for any unwanted effects on your liver function or blood cell production. We will give you blood test forms at your ILD outpatient appointment. These forms will allow you to have blood tests at either your GP surgery or local hospital.

Blood tests are required:

- Weekly for the first two months
- Then every two weeks until your target dose of azathioprine has been achieved
- Then monthly for the first year
- Then every two months after the first year

## Taking other medicines with azathioprine

Azathioprine may react with a number of medications. If you take any other medication (including over-the-counter medication and herbal remedies), please let your doctor or pharmacist know before starting azathioprine so that they can check whether it is safe to take. You should also discuss any new medications with your doctor or pharmacist before starting them.

## Warfarin

Please be aware that if you take warfarin, your usual dose may need to be adjusted. You will also need more frequent INR (international normalised ratio) tests (a blood test to see how well your blood clots) when starting azathioprine.

## Prednisolone

Taking prednisolone with azathioprine is safe. If you are already taking prednisolone before starting azathioprine, your prednisolone dose may need to be reduced. Please discuss this with your doctor.

## Alcohol

You should only drink alcohol in moderation while taking azathioprine, as they can both affect your liver. It is important that you do not exceed the government's recommended safe limits which advise that you should not drink more than 14 units of alcohol per week.

#### **Pregnancy and breastfeeding**

If you are taking azathioprine (male or female) and are thinking of starting a family, or you have become pregnant while taking azathioprine, do not stop taking the medication without speaking to the ILD clinical nurse specialist first. It is important to get specific advice about your situation before starting or stopping any medication.

If you are planning to breastfeed, please discuss this with the ILD clinical nurse specialist.

#### **Contact us**

If you have any questions or concerns about your condition, please contact your GP or our ILD clinical nurse specialist.

ILD clinical nurse specialist Telephone: **023 8120 6277** (during working hours or leave a message)

For further information about the medication, please read the leaflet which comes inside the box with your azathioprine. You can also contact our medicines helpline.

Medicines helpline Telephone: **023 8120 6907** (Monday to Friday, 9am to 6.30pm) Email: **medicinesadvice@uhs.nhs.uk** 

## **Useful links**

If you would like more information on living with ILD, please visit the websites below:

www.wildsupport.co.uk

www.blf.org.uk

www.actionpulmonaryfibrosis.org

www.arthritisresearchuk.org

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