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Royal Brompton & Harefield **NHS**
NHS Foundation Trust

Royal Brompton Hospital

Azathioprine monitoring

and dosage record for
respiratory patients with
interstitial lung disease





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This leaflet gives you general information on azathioprine monitoring. It does not replace the need for personal advice from a healthcare professional. If you have any questions, please ask your doctor or nurse.

This booklet holds information about your immunosuppression treatment. Please keep this booklet with you all the time and show it to any person treating you, including your doctor, pharmacist and nurse.

Your details

Name: _____

Address: _____

Date of birth: _____

Contact telephone number: _____

Important information

- This medicine has been prescribed for you alone. Do not give it to anyone else, even if their symptoms are the same as yours.
- Take this medication only as prescribed by your doctor. Do not change anything without checking with your doctor first.



Contact details for the healthcare team looking after you:

Indication for treatment:

Consultant name and contact number:

GP surgery address and telephone number:

Community pharmacy address and telephone number:

For further information on medicines, please contact the pharmacy medicines information patient helpline on **020 7351 8901**, 10am–5pm, Monday to Friday.

For advice outside working hours, call the NHS 111 service free of charge from any phone by dialling **111** or phone the Royal Brompton Hospital switchboard on **020 7352 8121** and ask for the operator. You can ask the operator to connect you to the on-call respiratory doctors.

Azathioprine (ay-za-THYE-oh-preen)

Azathioprine is an immunosuppressant drug. Immunosuppressant drugs are used to dampen down your body's immune system in conditions where the immune system is overactive, and reacts against your own body.

These drugs can be used:

- to prevent organ rejection in patients who have had an organ transplant
- in lung disease to reduce the inflammation which can contribute to your symptoms (if you take prednisolone, taking these treatments will usually mean that your dose of prednisolone can be reduced)
- in other conditions, for example, rheumatoid arthritis.

Your dose will depend on your body weight. Your doctor will decide what dose you need. Azathioprine is normally taken once a day after breakfast.

If you take any other medicines, please let your doctor know so that he/she can check that they are safe for you to take with azathioprine.

You will start on a low dose of azathioprine for one month to check that you do not experience any side effects or problems from this treatment. Your dose will gradually be increased to the maximum dose as prescribed by your doctor.

Azathioprine does not work immediately and it may be six to 12 weeks before you notice any benefit.



Your recommended dose

Test dose	mg daily	Start date:
Increased dose	mg daily	Start date:
Increased dose	mg daily	Start date:
Increased dose	mg daily	Start date:

Side effects

This is not the full list of possible side effects. Please refer to the patient information leaflet supplied with your medicine for a complete list.

If any of these symptoms develop, stop taking azathioprine and see your doctor immediately:

- redness of the skin or a skin rash, fever, shivering or chills
- feeling dizzy, confused, light-headed, weak or generally tired
- muscle and bone pain
- feeling sick and/or being sick
- kidney problems such as changes in the amount of urine you pass and the colour of your urine
- unexpected bleeding or bruising
- bad diarrhoea and/or abdominal pain

- fever or any other signs of infection
- developing jaundice (skin or whites of the eyes turning yellow)
- blistering and/or peeling of the skin, lumps on the body or patches on the skin.

Other side effects include:

- Hair loss/thinning – growth usually returns to normal even if treatment continues. You should avoid perms or hair dyes for the first few months as your hair will be weaker than normal.
- Loss of appetite, nausea and/or vomiting – this is usually reduced if the tablets are taken after food.
- Patients taking azathioprine may be more likely to develop different kinds of cancers, including skin cancers. You should limit your time in the sun, cover up with clothing and use high factor sunscreen.

While you are taking azathioprine your doctor will arrange for you to have regular blood tests. This will help to check for any unwanted effects on your liver and kidney function, or blood cell production.

Your GP should arrange for you to have a blood test every week for the first two months of therapy, and then every two weeks until your target dose has been reached. Your blood should then be checked monthly for the first year, then every two months after that.

It is important that you do not take azathioprine unless you are having regular blood tests.



Pregnancy and breastfeeding

- Azathioprine can cause problems for your unborn baby.
- Make sure that you are not pregnant before starting to take azathioprine.
- Treatment will only start after a negative pregnancy test.
- Use adequate contraception before starting treatment, during treatment and for eight weeks after stopping treatment.
- Contact your doctor immediately if you become pregnant during treatment.
- Do not breastfeed while you are taking azathioprine as small amounts of the drug can pass into breast milk.

What else do I need to know about azathioprine treatment?

Azathioprine works by suppressing the immune system. This may mean you have a decreased ability to fight infection.

If you get any signs of infection (sore throat or fever), experience jaundice (yellowing of the skin or whites of the eyes), or any unexplained bleeding or bruising, tell your doctor immediately.

If you have not had chickenpox and come into contact with someone who has chickenpox or shingles, or if you develop chickenpox or shingles, you should see your doctor immediately as you may need special treatment.

Can I take other medicines with azathioprine?

You must tell your doctor and pharmacist about any other medications you are taking. If you are taking allopurinol (medicine for gout) or warfarin (medicine to prevent blood clots), your doctor will need to give you a lower dose of azathioprine and change your warfarin dose.

Always ask your doctor or pharmacist about any other medicines before you start to take them. This includes over-the-counter medicines, herbal and alternative remedies. All of these can interact with azathioprine and affect your treatment.

The symptoms you are trying to treat with these other medicines may be a sign that azathioprine is not working safely for you. It is important for your doctor or pharmacist to know so they can help you. Keep a record of any symptoms and discuss these with your doctor.

While you are taking azathioprine, and for a short while after you stop, do not have any live vaccines such as yellow fever. Because your body's resistance is lower, this may cause you get an infection from the vaccine and the response to the vaccine may be reduced. Discuss any other vaccinations with your doctor first. Pneumovax and yearly flu vaccines are safe and recommended.

What do I do if I forget to take my medicine?

If you forget to take your medicine, you can take it as soon as you remember, but never take two doses at once. If you are unsure what to do, please ask your doctor for advice.



Other advice and precautions

- Swallow your tablets whole with a glass of water. Do not break or crush them.
- Handle your tablets as little as possible.
- Store your tablets at room temperature and out of reach of children.
- There is no particular reason for you to avoid alcohol while taking azathioprine, but drink it in moderation.

Things you must tell medical staff

- If you need emergency treatment, please tell the medical staff helping you that you are taking azathioprine.
- If you are pregnant, breastfeeding or allergic to any medicine, please tell your doctor before he/she prescribes any new medicines.
- If you take more tablets than you have been told to, you must contact your doctor immediately.

Over-the-counter medicines

The information in this record will help a pharmacist decide if over-the-counter medicines are suitable for you.

Monitoring results

Please ask the person responsible for prescribing/monitoring your treatment to record your test results below:

Date of blood test				
Dose				
Hb Male 13.4-16.6g/dL Female 11.5-15.1g/dL				
MCV 84-98fL				
WBC 5.1-11.4 $10^9/L$				
Platelets 147-397 $10^9/L$				
Neutrophils 2.0-7.5 $10^9/L$				
Lymphocytes 1.3-3.7 $10^9/L$				
ALT 0-40 IU/L				
Alk phos 38-126 U/L				
CRP 0-10 mg/L				
Urea 2.5-6.5 mmol/L				
Creatinine 60-120 $\mu\text{mol/L}$				
Total bilirubin 3-24 $\mu\text{mol/L}$				
Next test date				

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What the terms mean

Hb (haemoglobin): The oxygen-carrying component of red blood cells.

MCV (mean corpuscular volume): The average volume of a red blood cell.

WBC: White blood cells.

Platelets: An irregular, disc-shaped element in the blood that helps in blood clotting.

Neutrophils: White blood cells filled with enzymes used to kill and digest micro-organisms.

Lymphocytes: Small white blood cells that play a large role in defending the body against disease. They are responsible for immune responses.

ALT (alanine aminotransferase): An enzyme normally present in the liver and heart cells that is released into the bloodstream when the liver or heart is damaged. Abnormally high ALT levels may indicate that the liver is not functioning normally.

Alk phos (alkaline phosphatase): An enzyme made in the liver which is usually released into the blood during injury. Abnormally high levels may indicate some liver damage.

CRP (C-reactive protein): A component of blood that rises in response to inflammation in the body. This rate increases with more inflammation.

Urea and creatinine: Substances normally cleared from the blood by the kidneys. Increased blood levels of urea and creatinine indicate that the kidneys may not be functioning normally.

Bilirubin: A waste product created when red blood cells break down. Jaundice is caused by a build-up of bilirubin in the blood.



Your notes

A series of horizontal dotted lines for writing notes.

If you have concerns about any aspect of the service you have received in hospital and feel unable to talk to those people responsible for your care, call the Patient Advice and Liaison Service (PALS) on 020 7349 7715 or email pals@rbht.nhs.uk. This is a confidential service.

Royal Brompton Hospital
Sydney Street
London
SW3 6NP
tel: 020 7352 8121
textphone: (18001) 020 7352 8121

Harefield Hospital
Hill End Road
Harefield
Middlesex
UB9 6JH
tel: 01895 823 737
textphone: (18001) 01895 823 737

Website: www.rbht.nhs.uk

إذا كنت ترغب في الحصول على ترجمة فورية لمضمون هذه الوثيقة إلى اللغة العربية، يرجى منك الاتصال بأحد مستخدمينا بجناح المصلحة التي يتم فيها استشفائك. أحد موظفينا سيسعى لترتيب إجراءات الترجمة وإتمامها في الوقت المناسب لك.

Brosurteki bilginin Türkçe tercumesi için tedavi görüyor olduğunuz bölüme bas vurunuz. Bölüm personeli tercümenin gerçekleşmesini en kısa zamanda ayarlayacaktır.

