

# SHARED CARE PRESCRIBING GUIDELINE

## AZATHIOPRINE IN ADULT PATIENTS

### WITH RHEUMATOID ARTHRITIS

#### DOCUMENT DETAILS

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#### CHANGE HISTORY

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## Azathioprine Rheumatoid Arthritis

### NOTES to the GP

The information in the shared care guideline has been developed in consultation with Primary Care and it has been agreed that it is suitable for shared care.

This document should provide sufficient information to enable you to make an informed decision regarding the clinical and legal responsibility for prescribing this drug.

The questions below will help you confirm this:

- Is the patient's condition predictable or stable?
- Do you have the relevant knowledge, skills and access to equipment to allow you to monitor treatment as indicated in this shared care prescribing guideline?
- Have you been provided with relevant clinical details including monitoring data?

**If you can answer YES to all these questions** (after reading this shared care guideline), then it is appropriate for you to accept prescribing responsibility.

**If the answer is NO to any of these questions** you should contact the requesting consultant or your local PCT medicines management team. It would not normally be expected that shared care prescribing would be declined on the basis of cost.

Prescribing should follow requirements in the South East London Interface Prescribing Policy

**The doctor who prescribes the medication legally assumes clinical responsibility for the drug and the consequences of its use. The patient's best interests are always paramount**

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**Approved by DTC:**

Guy's & St Thomas' 27/4/2010  
King's College 24/5/2010

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## AGREEMENT TO PARTICIPATE IN SHARED CARE

### AZATHIOPRINE IN ADULT PATIENTS WITH RHEUMATOID ARTHRITIS

Consultant Name:	Patient name:
Consultant signature:	Patient Hospital Number: Patient NHS Number:
Date completed:	Patient Agreement <input type="checkbox"/> Patient agrees to shared care <input type="checkbox"/> Patient does not agree to shared care
Hospital:	
GP Name	Specialist Rheumatology Nurse Name
GP Signature	Specialist Rheumatology Nurse Signature
Date completed:	Date completed:

### ACTION

#### 1. Consultant Rheumatologist

- Explain shared care to patient and obtain agreement.
- Indicate requesting hospital.
- Complete and sign agreement.
- Fax full shared care guideline (including signed agreement to GP) - fax numbers at <http://www.nhs.uk>.
- Place original in notes.

#### 2. General Practitioner

- If **in agreement** to participate in shared care, sign and fax back to Rheumatology Department:
  - Guy's & St Thomas': 020 7407 7532
  - King's College: 020 3299 1734
- If **not in agreement** to participate in shared care, contact consultant and local PCT medicines management team within 2 weeks of receipt to discuss. If after discussion it is agreed not to undertake shared care for this patient, both the consultant and the local PCT Medicines Management team should be informed.
- Once decision reached file copy in patient's notes.

#### 3. Specialist Rheumatology Nurse

- Once received completed agreement by Consultant and GP, sign to confirm awareness that the patient will be under shared care.
- Take any necessary actions prior to shared care commencing (changing of appointments etc).
- Original to be filed in Patient's clinical record.

Attach patient addressograph or enter:  
 Patient name  
 Patient hospital number  
 Patient NHS number  
 Date of Birth

**Azathioprine**

**1. CIRCUMSTANCES WHEN SHARED CARE IS APPROPRIATE**

- Prescribing responsibility will only be transferred when the consultant and the GP are in agreement that the patient's condition is stable or predictable.
- The hospital will provide the patient with a supply of therapy until the patient is stable.

**2. AREAS OF RESPONSIBILITY**

Consultant	GP
<ul style="list-style-type: none"> <li>▪ Establish or confirm diagnosis and assess patient suitability for treatment</li> <li>▪ Baseline monitoring FBC, U&amp;E's, Creatinine, LFT's, ESR, CRP, TPMT assay.</li> <li>▪ Determine whether patient has had chickenpox and/or shingles in the past</li> <li>▪ Discuss treatment (including adverse effects) with patient and ensure they have a clear understanding of it. Where appropriate obtain signed consent.</li> <li>▪ Provide patient with Arthritis Research Campaign Patient information leaflet on azathioprine</li> <li>▪ Prescribe and monitor treatment according to local guideline or formulary until patient's condition is stable or predictable</li> <li>▪ Enter blood results in patient held monitoring booklet</li> <li>▪ Once the patient's condition is stable or predictable, fax a completed and signed shared care guideline with patient details completed to GP for consideration</li> <li>▪ Communicate TPMT status clearly to GP. Refer to page 8 for more information on TPMT status.</li> <li>▪ Continue to monitor all patients on biologic therapy. Shared care will not be sought for biologic therapy (anti-TNF's, rituximab).</li> <li>▪ Ensure contact details (section 4) are up to date.</li> </ul> <p><i>After agreement to shared care</i></p> <ul style="list-style-type: none"> <li>▪ Inform GP when patient is stable</li> <li>▪ Inform GP of abnormal monitoring results and any changes in therapy</li> <li>▪ Evaluate adverse events reported by GP or patient</li> <li>▪ Report suspected adverse effects to the MHRA: <a href="http://www.yellowcard.gov.uk">http://www.yellowcard.gov.uk</a></li> <li>▪ Carry out ongoing monitoring and follow up accordingly to shared care guidelines including continued need for therapy.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Consider shared care once the patient's condition is stable or predictable</li> <li>▪ Respond within 2 weeks of receipt</li> <li>▪ If named GP is not available over the next week pass request to a GP colleague</li> <li>▪ If in agreement to share care, confirm by faxing a signed copy of page 3 back to the rheumatology department.</li> <li>▪ If not in agreement to share care discuss with requesting consultant or local PCT medicines management team within 2 weeks of receipt of shared care request</li> </ul> <p><i>After agreement to shared care</i></p> <ul style="list-style-type: none"> <li>▪ Prescribe dose as recommended in most recent clinic letter and patient held monitoring book</li> <li>▪ Monitor general health of patient (discuss with rheumatologist if concerned) and check adverse effects as appropriate</li> <li>▪ Inform specialist consultant of suspected adverse effects</li> <li>▪ Report suspected adverse effects to the MHRA: <a href="http://www.yellowcard.gov.uk">http://www.yellowcard.gov.uk</a></li> <li>▪ Stop treatment on advice of specialist or immediately if urgent need arises</li> <li>▪ Check compatibility interactions when prescribing new or stopping existing medication</li> <li>▪ Carry out monitoring and follow up according to shared care guideline</li> <li>▪ Enter blood results in patient held monitoring booklet</li> <li>▪ Discuss any abnormal results with specialist consultant and agree any action required</li> <li>▪ Only ask specialist to take back prescribing should unmanageable problems arise. Allow an adequate notice period of at least 4 weeks</li> </ul>

### 3. PATIENT'S RESPONSIBILITIES

- Attend all hospital and GP appointments
- Take medicines as agreed
- Report any adverse effects to GP or hospital doctor
- Do not share medicines
- Keep a medicines monitoring booklet and show it to any healthcare professional that treats them
- Inform hospital and GP of any changes in address or telephone numbers

### 4. COMMUNICATION AND SUPPORT

#### Hospital contacts

#### Kings College Hospital

Rheumatology Consultants: 0203 299 9000 Telephone (Secretary)

Dr E. Choy	Ext 1732
Dr P. Gordon	Ext 1735
Professor Scott	Ext 1731
Dr S. Steer	Ext 1733
Locum	Ext 5611

Rheumatology Nurse Specialist Advice Line (Monday to Friday 09:00 – 17:00)  
Tel: 020 3299 8568 Fax: 020 3299 1734

Rheumatology Specialist Registrar via hospital switchboard 020 3299 9000

Pharmacist:  
For Drug Information queries: 0203 299 9000 ext 3007

#### Guys and St Thomas's Hospital

Rheumatology Consultants:  
Dr T Gibson, 020 7188 5867 or pager 881870 via switchboard.  
Prof A. Cope 020 7188 5884  
Dr B. Kirkham 020 7188 5884  
Dr S. Agarwal 020 7188 5867

Rheumatology Nurse Specialist Advice Line (Monday to Friday 09:00 – 17:00)  
Tel: 020 7188 5896 Fax: 020 7407 7532

Rheumatology Registrar via hospital switchboard 020 7188 7188 (Monday to Friday 09:00 – 17:00)

Rheumatology Consultant oncall available via hospital switchboard 020 7188 7188

Medicines Information 020 7188 5008 (St Thomas'), 020 7188 8748 (Guy's)

Attach patient addressograph or enter: Patient name Patient hospital number Patient NHS number Date of Birth
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Azathioprine
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**5. CLINICAL INFORMATION**

<b>Indication(s):</b>	Rheumatoid Arthritis
<b>Place in Therapy:</b>	Disease modifying anti-rheumatic drug (DMARD)
<b>Dose &amp; route of administration:</b>	Initially 50-75mg/day gradually increasing over 4 to 6 weeks to maintenance dose of 100-150mg/day. (TPMT heterozygous status – start on low dose and titrate slowly as determined by Consultant Rheumatologist)
<b>Duration of treatment</b>	Indefinitely if patient is responding well to treatment and in absence of significant side effects
<b>Criteria for stopping treatment</b>	<p><b>Withhold and discuss with Rheumatologist if any of the following occur:</b></p> <p>WBC &lt; 3.5 x 10<sup>9</sup>/l                      Neutrophils &lt; 2.0 x 10<sup>9</sup>/l                      Platelets &lt;150 x 10<sup>9</sup>/l                      MCV &gt; 105 fl                      AST, ALT &gt; twice upper limit of reference range                      Rash or oral ulceration</p> <p>Abnormal bruising or severe sore throat – Check FBC immediately and withhold until results available. Discuss with rheumatologist.</p> <p>Rash or oral ulceration</p> <p>Renal Impairment (GFR &lt; 20 ml/min)</p>

<p><b>Monitoring Requirements including frequency:</b></p>	<p><b>Consultant:</b></p> <p><b><u>Baseline</u></b> Full blood count, electrolytes, creatinine, liver function tests, erythrocyte sedimentation rate, c-reactive protein, TPMT assay. Inform GP if patient is heterozygous for TPMT. Establish whether patient has had chickenpox and/or shingles in the past.</p> <p><b><u>Ongoing</u></b> Full blood count and liver function tests weekly for 6 weeks then 2 weekly until dose stable for 6 weeks then monthly. If maintenance dose is achieved and stable for 6 months consider reducing monitoring to 3 monthly.</p> <p>Electrolytes, urea and creatinine every 6 months.</p> <p>In patients heterozygote for TPMT, monitoring should continue at monthly intervals.</p> <p>Shared care will be sought if the patient is stable after 3 months.</p> <p>Ask patient about any rashes or oral ulceration at each visit.</p> <p><b><u>Following dose changes</u></b> Full blood count and liver function tests 2 weeks after dose change then monthly for 6 months. If maintenance dose is achieved and stable for 6 months consider reducing monitoring to 3 monthly.</p> <p><b>GP:</b></p> <p><b><u>Ongoing</u></b> Full blood count and liver function tests every 3 months once stable, unless heterozygous for TPMT (continue monthly monitoring).</p> <p>Electrolytes, urea and creatinine every 6 months.</p> <p>Ask patient about any rashes or oral ulceration at each visit.</p> <p>Monitor for signs and symptoms of infection.</p>
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<b>Follow up arrangements</b>	<p><b>Consultant Rheumatologist:</b></p> <p>Subject to response to treatment: 3 monthly, 6 monthly or 12 monthly if well controlled and stable.</p> <p>Inform GP if patient is heterozygous for TPMT.</p> <p>Send a letter/results notification to the GP after each clinic attendance indicating current dose, most recent blood tests and frequency of visits. Update patient held medicines monitoring booklet with most recent blood results.</p> <p>Advise GP on review, duration and or discontinuation of treatment when necessary.</p> <p>Inform GP of patients who do not attend clinic appointments.</p> <p><b>GP:</b></p> <p>Blood tests as outlined above. Update patient held medicines monitoring booklet with most recent blood results.</p> <p>Request patient seen earlier if disease flare or adverse effects (including infection) experienced between appointments.</p>
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<p><b>Practical issues including other relevant advice/information:</b></p>	<p><b>TPMT Deficiency</b> Thiopurine methyl transferase (TPMT) deficiency (heterozygous state) may be associated with delayed (up to 6 months after starting azathioprine) haematological toxicity including bone marrow toxicity. Azathioprine can be fatal in homozygous TPMT states and is contraindicated.</p> <p><b>Adverse Effects</b> Patients should be advised to use a sunscreen with a high protection factor and protective clothing to reduce sunlight exposure.</p> <p><b>Pregnancy, Breast Feeding and Contraception</b> It is not recommended in pregnancy although after careful consideration of the risk/benefit rheumatologists may use it. Men and women considering family planning should be referred to their rheumatologist. Women treated with azathioprine must not breast feed.</p> <p><b>Vaccinations</b> Patients must not receive immunisations with live vaccines such as oral Polio, MMR, BCG or Yellow fever. Seasonal and pandemic influenza vaccination and Pneumovax are safe and recommended.</p> <p>If patient is non-immune (i.e. VZV IgG not detected), patients exposed to chickenpox/shingles should receive passive immunisation with VZIG (varicella-zoster immunoglobulin).</p> <p><b>Clinically Significant Drug Interactions</b> (refer to BNF for full list)</p> <ul style="list-style-type: none"> <li>• <b>Allopurinol</b> – enhanced effects and increased toxicity of allopurinol – reduce azathioprine dose to 25% of the original dose. Discuss with rheumatologist if allopurinol to be initiated.</li> <li>• <b>Warfarin</b> – reduced anticoagulant effect, monitor INR closely and increase maintenance dose if necessary</li> <li>• <b>Co-trimoxazole, trimethoprim, sulfamethoxazole</b> – avoid, increased risk of haematological toxicity</li> </ul>
<p><b>Information provided</b></p>	<p>Arthritis Research Campaign Leaflet: Azathioprine. Monitoring Booklet</p>
<p><b>Evidence Base for treatment and Key references:</b></p>	<p>NICE National Clinical Guideline: Rheumatoid Arthritis, February 2009 BSR/BHPR guideline for disease-modifying anti-rheumatic drug (DMARD) therapy in conjunction with the British Association of Dermatologists. 2008. BSR/BHPR DMARD quick reference guideline November 2009. British National Formulary 58 Summary of Product Characteristics, Imuran Renal Drug Handbook, 3<sup>rd</sup> Edition, Radcliffe Publishing.</p>

*NB: for full details of adverse effects and drug interactions refer to latest Summary of Product Characteristics*