**AZATHIOPRINE Shared Care Guideline**

### Introduction

**General statements**
- The patient will receive supplies of the drug from the hospital until the transfer of shared care is agreed between consultant and GP.
- The GP must reply in writing to the request for shared care as soon as practicable if unwilling to participate.
- The responsibility for prescribing and monitoring must be documented clearly in the patient’s hospital and GP notes.
- Shared care should only be considered when the patient’s clinical condition is stable or predictable.

### Indication

**Licensed indications** - rheumatoid arthritis, systemic lupus erythematosus, dermatomyositis and polymyositis, autoimmune hepatitis.

**Unlicensed indications** - systemic vasculitis, inflammatory bowel diseases (Crohn’s Disease, Ulcerative Colitis, Microscopic Colitis).

### Individual’s Responsibilities

#### Hospital specialist’s responsibilities
- Baseline monitoring and initial prescribing until the patient is established on treatment (minimum of 8 weeks).
- Monitoring disease progression and treatment response.
- Supporting and advising GPs.
- Monitoring booklets are available and may be beneficial in certain circumstances, for example if the patient receives blood monitoring at a location where results are inaccessible to the clinician. In these situations the Hospital Specialist will communicate this fact to the GP at the point when prescribing and monitoring is transferred.
- Ensure that the patient has an adequate supply of medication until GP supply can be arranged.
- Continue to monitor and supervise the patient according to this protocol, while the patient remains on this drug, and agree to review the patient promptly if contacted by the GP.
- Provide patient with rheumatology nurse helpline contact number.

#### General Practitioner’s responsibilities
- Ensure hospital is notified if unwilling to undertake prescribing and monitoring when requested.
- Prescribing following written request from specialist care.
- Ensure monitoring is undertaken according to shared care guideline and only continue prescribing if patient is compliant with monitoring, blood test results are satisfactory, and no adverse or unwanted side effects.*
- Follow guidance in the event of reaction or abnormality, record it and report back to specialist.
- Update patient’s monitoring booklet as appropriate (including test dates & results, when available).
- Encourage influenza and pneumococcal vaccination as per green book.
- Ensure no drug interactions with concomitant medicines.
- To inform Rheumatology Team if patient repeatedly does not attend routine blood monitoring.

### Monitoring required

**Baseline** - FBC, U&E, creatinine, LFT, TPMT assay (homozygous deficiency associated with serious toxicity risk).

The Hospital Specialist must confirm to the GP which stages of the maintenance monitoring have already been completed at the point when prescribing and monitoring are transferred to the GP.

**Maintenance** - Repeat FBC, LFT, U&E & creatinine fortnightly for 8 weeks.
# AZATHIOPRINE Shared Care Guideline

<table>
<thead>
<tr>
<th>When and how to discontinue treatment</th>
<th>Loss of efficacy, intolerable or serious side effects, abnormal blood monitoring – please see overleaf for detailed guidance as regards reducing dose or stopping treatment.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information given to the patient</td>
<td>Patient information leaflet and monitoring booklet (provided by hospital specialist) Patients should be warned to report any unexplained bleeding, bruising, purpura, sore throat or fever. Patient should be advised to limit exposure to ultraviolet light and wear appropriate clothing and a high factor (30 or above) sunscreen when exposed to the sun</td>
</tr>
<tr>
<td>Contact details</td>
<td>Documented in letter from specialist care to GP</td>
</tr>
</tbody>
</table>

## Product Information
The information in this Shared Care Guideline should be used in conjunction with the latest edition of the BNF and Summary of Product Characteristics

### Dosage
Target dose is usually 2-3 mg/kg/day (maximum = 3 mg/kg/day). Dose titration to be specified by specialist team starting treatment. Dose can be taken as single dose or divided with meals.

### Serious adverse effects
Hypersensitivity reactions including malaise, fever, vomiting, diarrhoea, rash & interstitial nephritis. Pancreatitis. Bone marrow toxicity (anaemia, leukopenia, thrombocytopenia) - patients should be advised to report unexplained bruising, bleeding, or severe sore throat. Alopecia. Increased risk of some cancers (skin and haematological). Opportunistic infections (potentially fatal if associated with neutropenia)

Refer to the current BNF and [www.medicines.org.uk/emc/](http://www.medicines.org.uk/emc/) for complete and up to date information.

### Precautions and contra-indications
Contraindications – hypersensitivity to azathioprine or mercaptopurine, homozygous TPMT deficiency (unless under close specialist supervision), severe hepatic and renal impairment. Precautions – pregnancy considered relatively safe and benefit of continuing treatment may outweigh risk. Avoid breastfeeding

### Clinically relevant drug Interactions and their management
**Allopurinol** blocks azathioprine metabolism. Concomitant administration of allopurinol and azathioprine may result in fatal toxicity: reduce azathioprine dose to one quarter (25%) of usual dose.  
**Warfarin** – anticoagulant effect reduced by azathioprine  
**Aminosalicylates** (sulfasalazine, mesalazine, olsalazine, etc) and **co-trimoxazole** may enhance bone marrow toxicity

Avoid live vaccines – examples could include oral polio, oral typhoid, MMR, BCG, yellow fever, varicella zoster – for full details check the latest SPC before administration

## Recommended action for abnormal results

<table>
<thead>
<tr>
<th>Investigation</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>WBC &lt; 3.5 x 10^9/L</td>
<td>Stop and contact appropriate specialty department immediately by phone or email*</td>
</tr>
<tr>
<td>Neutrophils &lt; 2 x 10^9/L</td>
<td></td>
</tr>
<tr>
<td>Platelets &lt; 150 x 10^3/L</td>
<td></td>
</tr>
<tr>
<td>Hb fall &gt; 1 g in 4 weeks or below 10 g</td>
<td>Check for increased disease activity Ask about NSAID use and symptoms of GI blood loss or dyspepsia and stop NSAIDS if implicated. Check MCV and iron studies</td>
</tr>
</tbody>
</table>

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Approved by South West Yorkshire Area Prescribing Committee for use in the population covered by the geographical area of Calderdale, Greater Huddersfield, North Kirklees and Wakefield CCGs  
Approved on – 17 July 2015  
Review Date – 17 July 2018
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<table>
<thead>
<tr>
<th>Condition</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Deranged liver function tests (ALT or AST)</strong></td>
<td></td>
</tr>
<tr>
<td>&lt; 3x upper limit of lab reference range</td>
<td>Consider endoscopy</td>
</tr>
<tr>
<td>&gt; 3x upper limit of lab reference range</td>
<td>Stop and contact appropriate specialty department immediately by phone or email*</td>
</tr>
<tr>
<td>MCV above 105 fL</td>
<td>Check TFT, B12 and folate, alcohol history</td>
</tr>
</tbody>
</table>

### Recommended action for adverse effects

<table>
<thead>
<tr>
<th>Adverse event</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypersensitivity, pancreatitis</td>
<td>Stop treatment and contact appropriate specialty department immediately by phone or email*</td>
</tr>
<tr>
<td>Bruising, bleeding</td>
<td>Check FBC, clotting screen, LFTs, alcohol history. If unexplained – stop treatment and contact hospital specialist</td>
</tr>
<tr>
<td>Malaise, flu-like symptoms</td>
<td>Contact specialist to consider switch to mercaptopurine.</td>
</tr>
<tr>
<td>Itching</td>
<td>Check for other causes, reduce dose and review</td>
</tr>
</tbody>
</table>
| Rash | Check for other causes: complications of disease, vasculitis, steroid effects, etc.  
Mild – reduce dose  
Severe – stop* |
| Alopecia | Stop and contact hospital specialist |
| Oral ulcers, stomatitis | Stop treatment and contact hospital specialist  
Check WBC  
Check for candida & treat accordingly  
Mild - mouthwash and good dental hygiene |
| Diarrhoea | Check for other causes  
Mild - treat symptomatically and/or reduce dose if persistent. Contact hospital specialist. Stop if severe.* |

*If the decision is made in primary care to stop treatment with azathioprine, please contact the relevant department immediately to let the patient’s specialist team know that disease-modifying treatment has been stopped.