

**Azathioprine  
Dermatology and Rheumatology Effective Shared Care Agreement**

**Patient details**

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Date of Birth: \_\_\_\_\_  
NHS number: \_\_\_\_\_

**Contact details  
Specialist:**

Address:  
Email:  
Contact number:

**GP**

Address:  
Email:  
Contact number:

**Patient**

Name:  
Contact number:

**Agreement to shared care, to be signed by GP and  
Specialist before prescribing is transferred to GP**

**Specialist  
Signature:** \_\_\_\_\_  
**Date:** \_\_\_\_\_

**GP  
Signature:** \_\_\_\_\_  
**Date:** \_\_\_\_\_

**Patient  
Signature:** \_\_\_\_\_  
**Date:** \_\_\_\_\_

This Effective Shared Care Agreement outlines suggested ways in which the prescribing responsibilities can be shared between the specialist and GP. GPs are invited to participate. If the GP is not confident to undertake these roles, then he or she is under no obligation to do so. In such an event, the total clinical responsibility for the patient's health remains with the specialist. If a specialist asks the GP to prescribe, the GP should reply to this request as soon as practicable.

**If a specialist asks the GP to prescribe, the GP should reply to this request within 2 weeks**

**The prescriber of the medication legally assumes clinical responsibility for the drug and the consequences of its use.**

### Responsibilities of the specialist initiating treatment

- Discuss with the patient options for treatment and the suitability of azathioprine
- Discuss the potential benefits and side effects of treatment with the patient
- Performs pre-treatment assessment including TPMT assay
- Sees patient 3-4 weeks later with TPMT result and, following agreement with the patient, initiate azathioprine.
- Undertake baseline tests
  - **FBC**
  - **LFT**
  - **U&Es**
  - **Creatinine**
  - **ESR** (gastroenterology and rheumatology only)
- Ask the GP whether he or she is willing to participate in shared care, and agree with the GP as to who will discuss the shared care arrangement with the patient. Consultant attaches copy of Shared Care Agreement (SCA) from the trust intranet to printed letter.
- Titrate azathioprine to an effective dose and stabilise the patient on an appropriate maintenance dose before seeking to initiate shared care
- Ensure agreed signed shared care form has been received back from GP to indicate that the GP is in agreement with prescribing and monitoring.
- Ensure this has been discussed with patient, and that patient has signed SCA form
- Once patient is stabilised, transfer prescribing and monitoring to GP
- Regular follow-up of patient (at least annually)
- Communicate promptly with the GP when treatment is changed
- Advise GP on dosage adjustment and when and how to stop treatment
- Have a mechanism in place to receive rapid referral of a patient from the GP in the event of deteriorating clinical condition and ensure that clear backup arrangements exist for GPs to obtain advice and support
- Report adverse events to the MHRA (via Yellow Card)

### Responsibilities of the General Practitioner

- Notify the specialist in writing within 2 weeks if they agree with this Shared Care Agreement.
- Prescribe azathioprine
- Arrange and record ongoing monitoring as agreed with specialist:
  - **FBC & LFT**: weekly for at least 6 weeks continue every 2 weeks until dose is stable for 6 weeks, then monthly U&Es and creatinine should be repeated 6 monthly. Following a change in dose repeat FBC and LFTs 2 weeks after dose change and then monthly.
  - ESR** (rheumatology only).
- Report any adverse drug reactions to the initiating specialist and the MHRA (via Yellow card)
- Ensure no drug interactions with other medicines
- Administer influenza vaccine annually unless otherwise advised by the initiating specialist
- Check patient has had ONE DOSE of pneumococcal vaccine (revaccination is not recommended except every five years in patients whose antibody levels are likely to have declined more rapidly e.g. asplenia.) - see BNF or Green Book
- Passive immunisation using Varicella immunoglobulin (VZIG) should be considered in non-immune patients if exposed to chickenpox or shingles.
- Ask about oral ulceration/sore throat, unexplained rash or unusual bruising at every consultation

Withhold azathioprine and contact the specialist if:

- WBC < 3.5 x 10<sup>9</sup>/L
- Neutrophils < 2 x 10<sup>9</sup>/L
- Platelets <150 x 10<sup>9</sup>/L
- AST/ALT > 2 times the upper limit of normal
- MCV>105fl (check serum folate and B12 &TSH, treat underlying abnormality. If results normal discuss with specialist)
- Oral ulceration/sore throat
- Unexplained rash or unusual bruising

Please note: A rapidly increasing or decreasing trend in any values should prompt caution and extra vigilance. Some patients may have abnormal baseline values, specialist will advise

### General information on azathioprine

#### Licensed Indication

- Severe rheumatoid arthritis

#### Unlicensed Indication

- Atopic dermatitis
- Psoriasis

#### Dosage and administration

In general, starting dosage is from 1mg/kg body weight/day, increasing after 4-6 weeks to 2-2.5mg/kg/day, depending on the clinical response (which may not be evident for weeks or months) and haematological tolerance

Dosage may need to be reduced in renal or hepatic impairment.

For the elderly it is recommended that the dosages used should be at the lower end of the range.

#### Contraindications

Patients known to be hypersensitive to azathioprine.

Hypersensitivity to 6-mercaptopurine (6-MP) should alert the prescriber to probable hypersensitivity to azathioprine

Azathioprine therapy should not be initiated in patients who may be pregnant, or who are likely to become pregnant without careful assessment of risk versus benefit.

Breastfeeding - consult with specialist.

#### Side effects

General signs of malaise such as headaches, dizziness, diarrhoea, rash, myalgia and arthralgia occur infrequently. If severe or persistent refer to initiating specialist.

Nausea can occur initially but can be reduced by taking the tablets after food.

Leucopenia, anaemia and thrombocytopenia: GPs should be alert to any oral ulceration/sore throat, unexplained rash or abnormal bruising or bleeding.

Abnormal liver function can occur early in treatment.

Pancreatitis has been reported in a small percentage of patients.

Cancer risk: patients receiving azathioprine are at increased risk of lymphomas and malignancies of the skin: avoiding excessive exposure to the sun and use of high factor sunscreens are advised

### Drug Interactions<sup>1</sup>

The following drugs should not be initiated by a GP unless discussed with the initiating specialist:

**Warfarin** effect may be reduced requiring an increased dose of warfarin

**Aminosalicylates** e.g. sulfasalazine: contribute to bone marrow toxicity – increased monitoring may be required

**Trimethoprim** or **co-trimoxazole**: potential risk of haematological abnormalities

**Allopurinol** enhanced effects and increased toxicity of azathioprine (reduce dose of azathioprine to 25% of original dose)

**Febuxostat** to be avoided with azathioprine on advice by manufacturers

**Live Vaccines** (e.g. oral polio, oral typhoid, MMR, BCG, yellow fever, varicella zoster) should be avoided

**Phenytoin, sodium valproate, carbamazepine** adsorption is reduced by azathioprine

**There are numerous drug interactions and the Summary of Product Characteristics ([www.medicines.org.uk](http://www.medicines.org.uk)) should be consulted both before treatment and when new drugs are introduced.**

<sup>1</sup> BNF 66 September 2013-March 2014