

**Mercaptopurine or Azathioprine  
Effective Shared Care Agreement  
For Gastroenterology**

**Section 1: Shared Care arrangements and responsibilities**

**Section 1.1 Agreement to transfer of prescribing of mercaptopurine or azathioprine to GP**

**Patient details**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Date of Birth: \_\_\_\_\_

NHS number: \_\_\_\_\_

<p><b>Contact details</b></p> <p><b>Consultant:</b></p> <p>Address: _____</p> <p>Email: _____</p> <p>Contact number: _____</p>
<p><b>GP</b></p> <p>Address: _____</p> <p>Email: _____</p> <p>Contact number: _____</p>
<p><b>Patient</b></p> <p>Name: _____</p> <p>Contact number: _____</p>

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

**Consultant**

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

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**GP**

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

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**Patient**

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## Section 1.2: Shared Care responsibilities

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 within 2 weeks**

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

<b>Responsibilities of the specialist initiating treatment</b>
1. Discuss with the patient options for treatment and the suitability of mercaptopurine or azathioprine
2. Discuss the potential benefits and side effects of treatment with the patient
3. Undertake baseline tests: <b>Thiopurine methyl transferase (TPMT), FBC, U&amp;Es, creatinine and LFTs</b>
4. See patient 3-4 weeks later with TPMT result and, following agreement with patient, initiate treatment with mercaptopurine or azathioprine
5. 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.
6. Titrate mercaptopurine or azathioprine to an effective dose. If both GP and consultant feel it is appropriate, shared care may be initiated before the patient is stabilised on the effective dose, as long as the dose is stable until the next consultant appointment.
7. Or commence treatment with mercaptopurine or azathioprine and once patient is on a stable dose between visits, consider transfer of prescribing and monitoring to GP. .
8. Ensure agreed signed shared care form has been received back from GP to indicate that the GP is in agreement with prescribing and monitoring.
9. Ensure this has been discussed with patient, and that patient has signed SCA form
10. Regular follow-up of patient (at least annually)
11. Communicate promptly with the GP when treatment is changed
12. Advise GP on dosage adjustment and when and how to stop treatment
13. 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
14. For younger patients check on immunisation status of MMR & DTaP before starting treatment
15. Report adverse events to the MHRA (via Yellow Card)

<b>Responsibilities of the General Practitioner</b>
1. Reply to the request for shared care as soon as practicable, and if required discuss shared care arrangement with patient.
2. Prescribe mercaptopurine or azathioprine at the dose recommended.
3. Arrange and record on-going monitoring as agreed with specialist: <b>FBC and LFTs</b> fortnightly for 8 weeks, continue every 4 weeks until dose stable for 6 weeks; then every 3 months. <b>U&amp;Es and creatinine</b> should be repeated 6 monthly
4. Ensure no drug interactions with other medicines
5. Check patient is using adequate contraception if appropriate

6. Continued prescribing is appropriate for patients attending regular review
7. Report adverse events to the MHRA (via Yellow Card)
8. Administer influenza vaccine annually unless otherwise advised by the initiating specialist
9. 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
10. Passive immunisation using Varicella Zoster Immunoglobulin (VZIG) should be considered in non-immune patients if exposed to chickenpox or shingles.
11. Ask about oral ulceration/sore throat, unexplained rash or unusual bruising at every consultation

Withhold treatment with mercaptopurine/azathioprine until discussed with 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
- LFTs twice the upper limit of normal (AST or ALP) (unless raised at the beginning of treatment).
- Rash or oral ulceration
- MCV > 105fl – check folate, B12 & TSH. Treat any underlying abnormality. If results normal check with specialist.

**Please note that in addition to absolute values for haematological indices a rapid fall or a consistent downward trend in any value should prompt caution and extra vigilance.**

Seek advice before reducing treatment if:-

- WBC<4 x 10<sup>9</sup>/L
- Neutrophils<2.5 x10<sup>9</sup>/L
- If patient suffering from nausea, rash or recurrent infections

### Responsibilities of the patient

1. To take the prescribed medication regularly unless advised by GP or specialist
2. To attend scheduled appointments with consultant and GP and for monitoring as detailed above
3. Report any adverse effects to the consultant or GP.
4. Share any concerns in relation to treatment.
6. Report to the consultant or GP if they do not have a clear understanding of the treatment

## Section 2: General Information on Mercaptopurine/Azathioprine

### Licensed Indication

#### Azathioprine/mercaptopurine

Although mercaptopurine and azathioprine are unlicensed in the treatment of inflammatory bowel disease, they are well-established treatment options in patients with unresponsive or chronically active disease.

## Dosage and administration

### Azathioprine

In general, starting dosage is from 1mg/kg body weight/day, increasing after 4-6 weeks to 2-3mg/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.

### Mercaptopurine- a typical dose regimen may be:-

1mg/kg/day increasing after 4-6 week to 1-1.5mg/kg/day.

Dose adjustment will be made by the consultant (or IBD nurse specialist). Lower doses if there is significant renal or hepatic impairment

**Time to response:** 6 weeks to 3 months

**NB** - Pneumovax and annual 'flu vaccine should be given. Passive immunisation should be carried out using Varicella Zoster Immunoglobulin (VZIG) in non-immune patients if exposed to chickenpox or shingles.

## Contraindications

Hypersensitivity to any component of the preparation

Pregnancy or breastfeeding

Individuals with inherited deficiency of the enzyme thiopurine methyltransferase (TPMT) are more susceptible to bone marrow suppression and toxicity.

There is an increased risk of skin malignancies - patients should be advised to wear protective clothing and use sunscreen with a high protection factor.

## Side effects

Nausea, diarrhoea, headache, arthralgia

Rash or mouth ulcers may respond to a dose reduction otherwise treatment should be discontinued.

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

Vaccinations with live organism vaccines are not recommended in immunocompromised individuals.

When **allopurinol** and mercaptopurine/azathioprine are administered concomitantly it is essential that only a quarter of the usual dose of mercaptopurine/azathioprine is given since allopurinol decreases the rate of catabolism of mercaptopurine/azathioprine

Possible increased risk of leucopenia when given with **aminosalicylate derivatives (e.g. olsalazine, mesalazine or sulfasalazine)**.

Increased risk of haematological toxicity when given with **sulfamethoxazole** and **trimethoprim**.

Avoid concomitant use with **clozapine** as increased risk of agranulocytosis.

Avoidance of **febuxostat** on manufacturers' advice

**Phenytoin, sodium valproate, carbamazepine** adsorption is reduced.

**Anticoagulants**-possible reduces anticoagulant effect of coumarins

## Monitoring

**Pretreatment assessment:** FBC, U&Es, creatinine, LFTs and thiopurine methyl transferase (TPMT) assay.

### Monitoring:-

- FBC and LFTs fortnightly for 8 weeks, continue every 4 weeks until dose stable for 6 weeks; then every 3 months.
- U&Es and creatinine should be repeated 6 monthly.

The consultant will be copied into the blood results.

Following a change in dose repeat FBC and LFTs 2 weeks after dose change and then monthly.

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