

SHARED CARE FRAMEWORK

The Pan Mersey Area Prescribing Committee recommends the prescribing of **AZATHIOPRINE** for patients within adult services.

SHARED CARE

1. Background

Azathioprine is used as an immunosuppressant anti-metabolite either alone or, more commonly, in combination with other agents (usually corticosteroids) to influence the immune response. Therapeutic effect may be evident only after weeks or months and can include a steroid-sparing effect, thereby reducing the toxicity associated with high dosage and prolonged usage of corticosteroids.

Dose adjustments and monitoring requirements for disease modifying drugs (DMDs) (licensed and unlicensed indications) included in this Framework are in line with the national guidance published by the British Society for Rheumatology 2017¹ and British Society for Gastroenterology IBD guidelines 2019².

2. Licensed Indications

- Rheumatoid arthritis
- Inflammatory bowel disease
- Systemic lupus erythematosus (SLE),
- Dermatomyositis and polymyositis
- Pemphigus vulgaris
- Auto-immune chronic active hepatitis
- Polyarteritis nodosa
- Auto-immune haemolytic anaemia
- Chronic refractory idiopathic thrombocytopenic purpura
- **Transplant indications are not included**

3. Locally agreed off-label use

- Psoriasis and psoriatic arthritis
- Chronic eczema and other autoimmune skin conditions
- Interstitial lung disease
- Steroid sparing agent in indications within this framework
- Connective tissue diseases
- Myasthenia gravis, inflammatory myopathies and neuropathies, vasculitis, and other immune-mediated central and peripheral nervous system diseases
- Autoimmune and inflammatory kidney conditions
- Sarcoidosis
- Atypical neuro-inflammatory disease

Supporting information

4. Initiation and ongoing dose regime

Transfer of monitoring and prescribing to primary care is normally 3 months after dose has been initiated. The duration of treatment will be determined by the specialist based on clinical response and tolerability.

Dosing information

1–3 mg/kg daily, adjusted according to response (consider withdrawal if no improvement or stabilisation within 3 months)

A dose reduction of 25% may be considered for chronic kidney disease (CKD) 4 and 50% for CKD 5. See Table 4 in [BSR monitoring guidelines](#)

Please note for rheumatology conditions a patient may be initiated on more than one DMD.

All dose adjustments will be the responsibility of the initiating specialist unless directions have been discussed and agreed with the primary care clinician.

Dose increases should be monitored by FBC creatinine/eGFR, ALT and/or AST and albumin every 2 weeks for 6 weeks after the dose increase, then revert back to previous schedule.

Termination of treatment will be the responsibility of the specialist.

5. Baseline investigations, initial monitoring and dose titration to be undertaken by specialist

Baseline

- Height, weight, BP, FBC, creatinine/eGFR, ALT and/or AST and albumin.
- TGN for gastroenterology indications
- Baseline thiopurine methyltransferase (TMPT) status.
- Vaccinations against pneumococcus and influenza are recommended.
- Shingles vaccine (Zostavax) is recommended as per the JCVI for eligible patients.
- Specialist to highlight in the first clinic letter notifying the GP of the decision to initiate DMDs that the GP will need to give the shingles vaccine if the patient is older than 69 years and for those <69 years but deemed clinically eligible for Zostavax by the Specialist Team. The pneumococcal vaccine should also be administered, if not already given. The GP should also be advised to add the patient to the influenza vaccine list.
- DMDs should be started 2-4 weeks AFTER administration of the shingles vaccine (Zostavax) as stated in the Green Book, therefore the Specialist Team should arrange this with the GP, in a timely manner so as not to delay commencement of DMDs.
- Patients should be assessed for comorbidities that may influence DMD choice, including evaluation of respiratory disease and screening for occult viral infection.
- Female patients should have yearly cervical screening and ideally be up to date on initiation.
- Treatment should not be started for 4 weeks after live vaccines (eg oral typhoid, MMR, BCG, yellow fever)

Initiation

- FBC, creatinine/eGFR, ALT and /or AST and albumin every 2 weeks until on stable dose for 6 weeks;
- Once on stable dose, monthly FBC, creatinine/eGFR, ALT and /or AST and albumin for 3 months plus TGN for gastroenterology indications.

(There may be different initial monitoring for gastroenterology indications eg. TGN [thioguanine nucleotides] and MeMP [methylated mercaptopurine])

6. Ongoing monitoring requirements to be undertaken by primary care

Monitoring	Frequency
FBC, creatinine/eGFR, ALT and/or AST and albumin CRP and ESR (rheumatology patients only)	After the initial monitoring period (see section 5), every 12 weeks, or more frequently in patients at higher risk of toxicity as advised by the specialist team. NB: Some of the initial monitoring (likely to be 1-2 months of monthly monitoring) may take place in primary care. The exact frequency of the monitoring to be communicated by the specialist in all cases. This includes patients heterozygous of TPMT

7. Pharmaceutical aspects

Route of administration

Oral

Formulation

Azathioprine 25mg and 50mg tablets

Administration details

Tablets should be taken with or just after food

8. Contraindications

Please note this document does not replace the Summary of Product Characteristics (SPC) and should be read in conjunction with it.

- Hypersensitivity to azathioprine or to any other component of the preparation

Very low TPMT activity (Homozygous recessive): Avoid. Can be fatal

9. Significant drug interactions

If considering prescribing allopurinol, refer the patient back to the consultant for advice and a dose adjustment. If allopurinol is given concomitantly with azathioprine, the dose of azathioprine should be reduced to 25 % of the original dose. Dose adjustment monitoring will continue as above.

For a comprehensive list consult the BNF or Summary of Product Characteristics. [SPC](#)

Seek advice from the initiating Specialist if there are any concerns about interactions.

10. Adverse effects and management

Adverse effect	Management
Abnormal bruising or severe sore throat	Stop drug until FBC results available, contact Specialist Practitioner (SP)
Fall in WCC $<3.5 \times 10^9/l$ Fall in neutrophils $<1.6 \times 10^9/l$ ($<2.0 \times 10^9/l$ for gastro indications) Fall in platelets $<140 \times 10^9/l$	Stop drug, contact SP
Increased MCV $>105fl$	Check folate, B12 & TSH. Treat if abnormal, contact SP for advice if normal
Unexplained reduction in albumin $<30g/L$ Abnormal LFTs – AST or ALT $> 100u/l$ Rash	Contact SP

Supporting information

Mouth ulcers	
Acute abdominal pain	Check serum amylase. Consider pancreatitis.
Increase in serum creatinine >30% over period of 12 months or less OR decline in eGFR > 25%	Contact SP if there is new or unexplained renal impairment

11. Advice to patients and carers

The specialist will counsel the patient with regard to the benefits and risks of treatment and will provide the patient with any relevant information and advice, including patient information leaflets on individual drugs.

12. Pregnancy and breast feeding

Compatible throughout pregnancy at ≤ 2 mg/kg/day after a careful assessment of risk versus benefit.

Compatible with breastfeeding.

Compatible with paternal exposure.

If a patient becomes pregnant while on treatment, they should be referred back to the hospital for review.

[\(BSR & BHPR guideline on prescribing in pregnancy and breastfeeding January 2016\)](#)

13. Specialist contact information

See appendix 2.

14. Additional information

Where patient care is transferred from one specialist service or GP practice to another, a new shared care agreement must be completed.

15. References

1. [BSR monitoring guidelines](#)
2. [British Society for Gastroenterology Guidelines 2019](#)
3. [Azathioprine Summary of Product Characteristics](#)
4. [The Green Book - Immunisation against infectious diseases](#)

To be read in conjunction with the following documents.

1. Policy for Shared Care (Appendix 1).
2. Shared care agreement (Appendix 2).

When two or more DMDs are initiated, one shared care agreement form should be completed that includes all relevant drugs.

Appendix 1

Policy for Shared Care

Shared care is only appropriate if it provides an optimum solution for the patient, and it meets the criteria outlined in the Shared Care section of the Pan Mersey Definitions and Criteria for Categorisation of Medicines in the Pan Mersey Formulary [document](#).

Before prescribing responsibilities are transferred to primary care:

- > Prescribing responsibility will only be transferred when the consultant and the patient's GP agree that the patient's condition is stable.
- > All information required by the shared care framework for the individual medicine has been provided to the patient's GP.
- > Patients will only be referred to the GP once the GP has agreed to the Shared Care Agreement and returned signed copies.

Inherent in any shared care agreement is the understanding that participation is at the discretion of the GP, subject to the availability of sufficient information to support clinical confidence.

Specialist Responsibilities in Shared Care

- > To initiate the medicine, prescribe, monitor for toxicity and efficacy as described by the shared care framework until the patient is stabilised.
- > To ensure the patient or their carer:
 - > Is counselled with regard to the risks and benefits of the medicine.
 - > Is provided with any necessary written information to the patient with regard to the individual medicine including patient information leaflets on individual drugs.
- > Obtain and document informed consent from the patient when any medicines is prescribed for an off-label indication for any condition.
- > To be familiar with the shared care framework.
- > To provide all information to the patient's GP as required by the shared care framework when prescribing responsibility is initially transferred and at any subsequent times as necessary for safe and effective treatment of the patient.
- > To assess the patient regularly as necessary for the duration of therapy.
- > To review the patient promptly if required by the GP concerned.
- > To meet any additional requirements as required by the individual medicine shared care framework.
- > To communicate failure of a patient to attend a routine hospital review and advise the GP of appropriate action to be taken.
- > Addition of a second DMD: Following the addition of a new drug to an existing regime covered by a Shared Care Agreement, the Specialist must initiate, prescribe, and monitor the new drug in accordance with the relevant shared care agreement, including subsequent review, and inform the GP of this. A new Shared Care Agreement must then be initiated for the new drug.

Supporting information

Primary Care Responsibilities in Shared Care

- > To reply to a written request for Shared Care within 21 days ensuring both copies of the Shared Care Agreement are signed if appropriate.

If agreeing to shared care, the GP is asked:

- > To prescribe, manage and monitor the medicine as advised by the Specialist and in line with the individual Shared Care Framework.
- > To review the patient as required by the Shared Care Framework.
- > To make appropriate and contemporaneous records of prescribing and/or monitoring and to note the existence of the Shared Care Agreement on the patient's clinical record. A Snomed code of "268529002 Shared Care- Specialist/GP" can be used.
- > To be familiar with the individual Shared Care Framework.
- > To report any adverse effects of treatment to the specialist team.
- > To inform the Specialist of any relevant change in the patient's circumstances.
- > To seek Specialist advice as appropriate.
- > To meet any additional requirements as required by the individual Shared Care Framework.
- > To respond to Specialist communication relating to any change or addition to the patient's treatment covered by the Shared Care Agreement.

Where the GP wishes to withdraw prescribing, for example when the patient fails to attend for monitoring, they need to give the specialist team a minimum of 14 days' notice of their need to resume responsibility for prescribing. The specialist is required to acknowledge this request within the 14-day time period.

Supporting information

Appendix 2

Shared Care Agreement

Disease modifying drugs (DMDs)

Request by Specialist Clinician for the patient's GP to enter into a shared care agreement

Part 1

To be signed by Consultant / Prescribing member of Specialist Team (circle or underline as appropriate)

Date _____

Name of patient _____

Address _____

Patient NHS No _____

Patient hospital unit No _____

Diagnosed condition _____

Dear Dr _____

I request that you prescribe (include doses)

(1) _____

(2) _____

(3) _____

(4) _____

for the above patient in accordance with the enclosed shared care framework.

Last Prescription Issued: / / Next Supply Due: / /

Date of last blood test: / / Date of next blood test: / /

Frequency of blood test:

I confirm that the patient has been stabilised and reviewed on the above regime in accordance with the Shared Care Framework and Policy.

I confirm that if this is a Shared Care Agreement for a drug indication which is unlicensed or off label, informed consent has been received.

Details of Specialist Clinicians

Name _____ Date _____

Consultant / Prescribing member of Specialist Team (circle or underline as appropriate)

Signature _____

In all cases, please also provide the name and contact details of the Consultant.

Please add patient addressograph
here

Supporting information

When the request for shared care is made by a prescriber who is not the specialist, it is the supervising consultant who takes medico-legal responsibility for the agreement.

Consultant: _____

Contact details:

Telephone number: _____ Ext: _____

Address for return _____

of documentation _____

Please add patient addressograph here

Part 2

To be completed by Primary Care Clinician

I agree to prescribe _____ for the above patient in accordance with the enclosed shared care framework.

GP signature _____ Date _____

GP name _____ Please print

GP: Please sign and return a copy within 21 calendar days to the address above

OR

GP - If you do not agree to prescribe, please delete the section above and provide any supporting information as appropriate below: