

TARGET AUDIENCE	Board-wide
PATIENT GROUP	All patients aged 12 years and older taking Azathioprine

References

- British National Formulary (2024). *BNF / NICE*. [online] NICE. Available at: <https://bnf.nice.org.uk/>.
- Specialist Pharmacy Service (2021). *Medicines Monitoring*. [online] SPS - Specialist Pharmacy Service. Available at: <https://www.sps.nhs.uk/home/tools/drug-monitoring/>.
- Electronic Medicines Compendium (2019). *Home - electronic medicines compendium (emc)*. [online] Medicines.org.uk. Available at: <https://www.medicines.org.uk/emc>

Governance information for drug specific document

Lead Author(s):	Medicines Policy and Guidance Team
Endorsing Body:	Area Drug and Therapeutics Committee
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Responsible Person (if different from lead author)	Kirsty Macfarlane/Mark Russell

AZATHIOPRINE Drug Specific Monitoring Document

Medication Name	Azathioprine
Actions by specialist clinician before initiation	<ul style="list-style-type: none"> • Measure thiopurine methyltransferase (TPMT) activity • Full blood count • LFTs • Blood pressure • U&Es • eGFR or CrCl • Weight <p><i>For all drugs, specialist clinicians should consider whether vaccination/exclusion of other contraindications (including active infection), is required and arrange as appropriate..</i></p>
DIS actions on starting treatment and following dose titration during initiation period	<p>GI – 2 weeks after starting; then at 4, 8, and 12 weeks; then 3 monthly</p> <ul style="list-style-type: none"> • FBC • U&Es • eGFR or CrCl • Liver function tests <p>Consider at week 8 - Methylmercaptapurine to Thioguanine ratio</p> <p>Dermatology/ Rheumatology – every 2 weeks until on stable dose for 6 weeks. Once on stable dose monthly for 3 months, then every 12 weeks.</p> <ul style="list-style-type: none"> • FBC • U&Es • eGFR or CrCl • Liver function tests <p>Consider at week 4 & 16 - Methylmercaptapurine to Thioguanine ratio</p>
Ongoing monitoring in Primary Care once stable	<p>Every 12 weeks</p> <ul style="list-style-type: none"> • LFTs • FBC • U&Es • eGFR or CrCl
Action if monitoring is outside reference range	<p>Monitor Trends - be aware of trends in results and respond accordingly.</p> <p>Respond to absolute levels - Consider stopping treatment and contacting a specialist any of the following develop on two consecutive results 1 week apart:</p> <p><u>Full blood count</u></p> <ul style="list-style-type: none"> • WCC less than $3.5 \times 10^9/L$, • Neutrophils less than $1.6 \times 10^9/L$ • Unexplained eosinophilia more than $0.5 \times 10^9/L$ (up to $1.0 \times 10^9/L$ acceptable in patients with atopic dermatitis) • Platelets less than $140 \times 10^9/L$ • MCV greater than 105f/L then check B12, folate, thyroid-stimulating hormone levels. If abnormal treat; if normal accept MCV up to 110f/L. Discuss with specialist team if $> 110f/L$. <p><u>Liver function</u></p> <ul style="list-style-type: none"> • Unexplained fall in serum albumin less than 30g/L • AST and/or ALT greater than 100units/L <p><u>Renal function</u></p> <ul style="list-style-type: none"> • Creatinine increase greater than 30% above baseline over 12 months • eGFR less than 60ml/min/$1.73m^2$ (repeat in 1 week, if still more than 30% from baseline, withhold and discuss with specialist team)
Actions to take if restarting medication after treatment break	<p>Actions needed may vary - consult specialist team for further guidance</p> <p>Patients should be referred by the specialist clinician to the drug initiation hub if re-titration or enhanced monitoring is required.</p>

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CONSULTATION AND DISTRIBUTION RECORD	
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Consultation Process / Stakeholders:	LMC, GP Sub-committee, Karen Donaldson, Eimear Gordon, Anthony Carson, Richard Shearer, Rebecca Malley, Rosemary Beaton, Drug Initiation Service pharmacists, Acute specialist dermatology, rheumatology and gastro-intestinal pharmacists.
Distribution	Acute specialist consultants and pharmacists, Senior primary care pharmacists, all individuals involved with the Drug Initiation Service, LMC and GP sub-committee

CHANGE RECORD			
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