

## MERCAPTOPURINE Drug Specific Monitoring Document



<b>TARGET AUDIENCE</b>	Board-wide
<b>PATIENT GROUP</b>	All patients aged 12 years and older taking Mercaptopurine

### 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

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

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Medication Name	MERCAPTOPURINE
Actions by specialist clinician before initiation	<ul style="list-style-type: none"> <li>• Thiopurine methyltransferase (TPMT) activity</li> <li>• FBC</li> <li>• LFTs</li> <li>• U&amp;Es</li> <li>• eGFR</li> </ul> <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>Week 2, 4, 8 and 12</p> <ul style="list-style-type: none"> <li>• FBC</li> <li>• LFTs</li> <li>• U&amp;Es</li> <li>• eGFR</li> </ul>
Ongoing monitoring in Primary Care once stable	<p>Every 3 months</p> <ul style="list-style-type: none"> <li>• FBC</li> <li>• LFTs</li> <li>• U&amp;Es</li> <li>• eGFR</li> </ul>
Action if monitoring is outside reference range	<ul style="list-style-type: none"> <li>• <b>Monitor trends</b> - be aware of trends in results and respond accordingly.</li> <li>• Respond to absolute levels - Consider stopping treatment and <b>contacting a specialist</b> if any of the following develop: <ul style="list-style-type: none"> <li>○ <b>Full blood count</b> <ul style="list-style-type: none"> <li>▪ Neutrophils less than <math>2 \times 10^9/L</math>; if less than <math>1 \times 10^9/L</math>, immediate discussion as may require antibiotics and possibly GCSF if febrile</li> <li>▪ Platelets less than <math>140 \times 10^9/L</math></li> <li>▪ WCC less than <math>3.5 \times 10^9/L</math></li> <li>▪ MCV greater than 105fL</li> </ul> </li> <li>○ <b>Liver function</b> <ul style="list-style-type: none"> <li>▪ AST or ALT greater than 100units/mL</li> <li>▪ Albumin less than 30g/L</li> </ul> </li> <li>○ <b>Renal function</b> <ul style="list-style-type: none"> <li>▪ Creatinine increase greater than 30% above baseline over 12 months</li> <li>▪ eGFR less than 59ml/min/1.73m<sup>2</sup> (repeat in 1 week, if still more than 30% from baseline, withhold and discuss with specialist team)</li> </ul> </li> </ul> </li> </ul>
Actions to take if restarting medication after treatment break	<p>Actions may vary. Consult specialist team for further guidance if required</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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Lead Author	Kirsty Macfarlane/Mark Russell	Date approved	18.06.2025
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CONSULTATION AND DISTRIBUTION RECORD	
<b>Contributing Author / Authors</b>	Kirsty Macfarlane, Mark Russell, Kendal Paterson, Katrina Maroni
<b>Consultation Process / Stakeholders:</b>	LMC, GP Sub-committee, Jennifer Gibson, Karen Donaldson, Eimear Gordon, Anthony Carson, Richard Shearer, Rebecca Malley, Rosemary Beaton, Drug Initiation Service pharmacists, Acute specialist gastrointestinal and rheumatology consultants and pharmacists.
<b>Distribution</b>	Acute specialist consultants and pharmacists, Senior primary care pharmacists, all individuals involved with the Drug Initiation Service, LMC and GP sub-committee

CHANGE RECORD			
Date	Lead Author	Change	Version

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