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| SECTION TO BE COMPLETED BY INITIATING DOCTOR | | | | | | | | | | | |
| Patient Name: | |  | | | | NHS Number: | | | |  | |
| Date of Birth: | |  | | | | Date treatment started: *(add date)* | | | |  | |
| Drug Name: | |  | | | | Dose: | | | |  | |
| Patient Consent   * I confirm the risks and benefits of treatment, the baseline tests conducted, the need for monitoring, how monitoring will be arranged, and the roles of the consultant and GP, and my role in shared care have been explained to me. * I confirm I have been provided with a copy of this shared care information. * I will tell the specialist or GP if I do not have a clear understanding of the treatment. * I will share any concerns in relation to the above treatment. * I will report any adverse effects to the specialist or GP whilst taking the above treatment.   Additionally if prescribing is unlicensed   * I am aware that azathioprine is not licensed to treat my condition but the risks and benefits have been explained to me and I agree to take this medicine as prescribed. | | | | | | | | | | | |
| Patient Name: |  | | | | Signature: |  | | | | Date: |  |
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| Back-up Advice and Support | | | | | | | | | | | |
| Name | | | | Telephone number | | | | E-mail address | | | |
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| **INDICATIONS (Please tick as appropriate)**  Azathioprine is licensed for the following indications:-   |  |  | | --- | --- | |  | For the acute and maintenance treatment of patients with inflammatory bowel disease or autoimmune liver disease e.g auto-immune chronic active hepatitis as a steroid sparing agent | |  | In combination with corticosteroids and/or other immunosuppressive agents in treatment of systemic lupus erythematosis and to reduce the corticosteroid requirements of such patients | |  | For the treatment of rheumatological conditions in adults e.g. polyarteritis nodosa | |  | For the treatment of pemphigus vulgaris, and dermatomyositis | |  | |For treatment of auto-immune haemolytic anaemia and chronic refractory idiopathic thrombocytopenic purpura |   Azathioprine is NOT licensed for the following indications but there is a good body of medical evidence that supports its use:-   |  |  | | --- | --- | |  | In combination with corticosteroids and/or other immunosuppressive agents to treat and maintain remission for Uveitis, a group of ocular inflammatory diseases that has vision threatening potential. The disease entities include Sarcoidosis, Behcets Disease, Sympathetic Ophthalmia, Retinal vasculitides, VKH syndrome, Birdshot and Serpiginous Choroidopathy | |  | For the treatment of pulmonary disease including sarcoidosis, interstitial fibrosis and asthma | |  | For the treatment of myasthenia gravis |      * One copy filed in patient record * One copy of agreement sent to general practitioner | | | | | | | | | | | |
| Name of Initiating Doctor: | | |  | | | | Speciality: | |  | | |
| Consultant: | | |  | | | | Fax number | |  | | |
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| Patient Name: |  | NHS Number: |  |

SECTION TO BE COMPLETED BY GENERAL PRACTITIONER

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| I agree\*/don’t agree\* to enter into a shared care arrangement for the treatment and monitoring of the above patient with this medicine (\*delete as appropriate) | | | |
| GP Name: |  |  | |
| Signature: |  | Date: |  |
| Once signed please detach this sheet and fax to the number shown above.  File copy in patient’s record and add shared care – specialist/GP read code 66S2 or XaK6z depending on GP clinical system. | | | |

AREAS OF RESPONSIBILITY FOR THE SHARING OF CARE

This shared care agreement outlines suggested ways in which the responsibilities for managing the prescribing of azathioprine can be shared between the specialist and general practitioner (GP). GPs are **invited** to participate. If GPs are not confident to undertake these roles, then they are under no obligation to do so. In such an event, the total clinical responsibility for the patient for the diagnosed condition remains with the specialist. **If a specialist asks the GP to prescribe this drug, the GP should reply to this request as soon as practicable.**

Sharing of care assumes communication between the specialist, GP and patient. The intention to share care should be explained to the patient by the doctor initiating treatment. It is important that patients are consulted about treatment and are in agreement with it.

The doctor who prescribes the medication legally assumes clinical responsibility for the drug and the consequences of its use.

**RESPONSIBILITIES and ROLES**

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| **Specialist responsibilities** |
| 1. Diagnosis and initiation of azathioprine treatment, ensuring that there are no interactions with current therapy or disease states. 2. Discuss the benefits and side effects of treatment with the patient/carer, including providing the patient with information leaflets and a monitoring record book if required. 3. If appropriate, patients should be advised about the impact of treatment on fertility, pregnancy and breastfeeding. Men planning to conceive should also receive appropriate counselling. 4. Undertake baseline tests including weight, blood pressure, ALT (or AST), eGFR, CRP, chest X-ray and TMPT levels) prior to starting therapy. 5. Advise patient to be vaccinated against pneumococcus and influenza infection (via GP). 6. Notify the patients GP that treatment has started and inform results of baseline tests. 7. Prescribe azathioprine until a stable dose is reached and blood tests are stable for three months. 8. Contact the GP to ask whether he or she is willing to participate in shared care (once the patient is stable). Shared care can only commence when GP written consent has been received 9. Discuss the shared care arrangement with the patient so that the patient/carer is clear what needs to be monitored and when. 10. Where applicable advise patient treatment is off-label 11. Dose stabilisation: initial dosage adjustment until stable. Thereafter, during maintenance treatment, advice to the GP on any further dose adjustments required. If dose and bloods are stable for 3 months the GP, if agreeable, can monitor the patient as below 12. Periodically review the patient’s condition and communicate promptly with the GP when treatment is changed. 13. Have a mechanism in place to receive rapid referral of a patient from the GP in the event of deteriorating clinical condition. 14. Advise the GP on stopping treatment (if appropriate). 15. Report serious adverse events to the MHRA and GP 16. Ensure that clear backup arrangements exist for GPs to obtain advice and support. |
| **General Practitioner responsibilities** |
| 1. Reply to the request for shared care as soon as practicable. 2. File copy in patient’s record and add *shared care – specialist/GP* read code 66S2 or XaK6z depending on GP clinical system. 3. Ensure compatibility with other concomitant medication and prescribe azathioprine at the dose recommended. 4. Once patient is stable and shared care has been agreed, monitor patient as below. 5. Adjust the dose as advised by the specialist. 6. Report to and seek advice from the specialist on any aspect of patient care that is of concern and may affect treatment. 7. Refer patient to the specialist if his or her condition deteriorates. 8. Stop treatment on the advice of the specialist or immediately if an urgent need to stop treatment arises. 9. Report adverse events to the specialist and MHRA. |

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| **SUPPORTING CLINICAL INFORMATION** |
| Dosage and Administration |
| Azathioprine is available as tablets containing 25mg or 50mg. Azathioprine should be taken with or immediately after food. The usual dose is from 1 to 3mg per kg per day, adjusted according to response. |
| Contraindications |
| Azathioprine is contra-indicated in patients known to be hypersensitive to it. 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. |
| Side Effects |
| Very common - Depression of bone marrow function; leucopenia, viral, fungal, and bacterial infections, thrombocytopenia.  Uncommon – cholestasis and degeneration of liver function tests, pancreatitis, anaemia.  Rare – alopecia, photosensitivity, life threatening hepatic damage, colitis, diverticulitis and bowel perforation reported in transplant population; severe diarrhoea in inflammatory bowel disease population. Agranulocytosis, pancytopenia, aplastic anaemia, megaloblastic anaemia, erythroid hypoplasia. Neoplasms including non-Hodgkin's lymphomas, skin cancers (melanoma and non-melanoma), sarcomas (Kaposi's and non-Kaposi's) and uterine cervical cancer in situ, acute myeloid leukaemia and myelodysplasia  Very rarely causes reversible pneumonitis, Stevens-Johnson syndrome and toxic epidermal necrolysis.  A hypersensitivity reaction has been uncommonly reported which includes general malaise, dizziness, nausea, vomiting, diarrhoea, fever, rigors, exanthema, rash, vasculitis, myalgia, arthralgia, hypotension, renal and hepatic dysfunction and cholestasis. Following a hypersensitivity reaction, careful consideration should be given to restarting treatment with azathioprine. |
| **Monitoring** |
| FBC, creatinine / eGFR, ALT (or AST) and albumin every 2 weeks until dose and monitoring stable for 6 weeks; thereafter monthly for three months, then at least every 12 weeks.  Dose increases should be monitored by FBC, creatinine / eGFR, ALT (or AST) and albumin every 2 weeks until on stable dose for 6 weeks then revert to previous schedule.  Action required if abnormal results  Contact specialist team urgently and consider interruption in treatment if any of the following develop:  • WCC <3.5 x109/L  • Neutrophils <1.6 x 109/L  • Unexplained eosinophilia >0.5 x 109/L  • Platelet count <140 x 109/L  • MCV > 105 f/L  • Creatinine >30% above baseline and/or calculated GFR <60  • ALT and/or AST >100 units/L  • Unexplained fall in serum albumin |
| **Drug Interactions** |
| Xanthine oxidase activity is inhibited by allopurinol, oxipurinol and thiopurinol which results in reduced conversion of biologically active 6-thioinosinic acid to biologically inactive 6-thiouric acid. When allopurinol, oxipurinol and/or thiopurinol are given concomitantly with 6-mercaptopurine or azathioprine, the dose of 6-mercaptopurine and azathioprine should be reduced to one-quarter of the original dose.  Inhibition of the anticoagulant effect of warfarin, when administered with azathioprine, has been reported.  Where possible, concomitant administration of cytostatic drugs, or drugs which may have a myelosuppressive effect, such as penicillamine, should be avoided. There are conflicting clinical reports of interactions, resulting in serious haematological abnormalities, between Imuran and co-trimoxazole.  Olsalazine, mesalazine and sulfasalazine may inhibit TPMT enzyme, resulting in an increased toxicity. |
| **Vaccination** |
| The use of LIVE vaccine is not recommended during drug treatment with immunosuppressant drugs. |
| References |
| 1. BSR and BHPR guideline for the prescription and monitoring of non-biologic disease-modifying anti-rheumatic drugsupdated 2017 https://academic.oup.com/rheumatology/article/3053478/BSR-[and-BHPR-guideline-for-the-prescription-and?searchresult=1](https://academic.oup.com/rheumatology/article/3053478/BSR-and-BHPR-guideline-for-the-prescription-and?searchresult=1) ACCESSED April 2018 2. BSR and BHPR guideline on prescribing drugs in pregnancy and breastfeeding—Part I: standard and biologic disease modifying anti-rheumatic drugs and corticosteroids. <https://academic.oup.com/rheumatology/article/55/9/1693/1744535> |

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| **Version Control** | | | |
| **Version** | **Date of Issue** | **Author/s** | **Brief Description of Changes** |
| 1.0 |  |  |  |