Azathioprine - IBD patients only - Summary Clinical Guideline

Ref. No: CG-T/2023/035

Practical Guide to Thiopurine Treatment

Pre-treatment investigations and management

FBC, U&E, LFT
TPMT level
Hepatitis B serology (surface antigen and core antibody)
- Treat with reverse transcriptase inhibitors if positive

Hepatitis C serology
- Treatment under specialist guidance if positive

HIV
- Treatment under specialist guidance if positive

EBV IgG
- Treat acute infection with ganciclovir or foscarnet
- Consider alternative treatments if negative

VZV IgG
- If no history of infection, vaccinate patient before initiation of thiopurines as long as steroid free for 3 months

Pneumococcal vaccine (do not delay drug initiation)
Influenza vaccine annually (do not delay drug initiation)

Starting dose

Dependent on TPMT level

Zero	Avoid, consider other treatment	
Low	AZA MP	1-1.25mg/kg 0.5-0.75mg/kg
Normal/High	AZA MP	2-2.5mg/kg 1-1.5mg/kg

Start at target dose – no need for incremental increase

Monitoring blood tests

FBC & LFTs 2 weeks
4 weeks
8 weeks
12 weeks
Then every 3 months

Abnormal FBC/bone marrow toxicity

Full blood count indices	Action for thiopurine drug therapy
WBC 2.5-3.5 x 10^9/l (mild)	Check metabolites, monitor or consider reducing dose
WBC 1.5-2.5 x 10^9/l (moderate)	Stop drug for 1 week, then restart at lower dose with weekly FBC monitoring
WBC <1.5 x 10^9/l (severe)	Withdraw treatment
Lymphopenia 0.5-1.5 x 10^9/l (mild-moderate)	Observe, correct metabolites
Lymphopenia <0.5 x 10^9/l (severe)	Reduce dose
Neutropenia 1-1.5 x 10^9/l (mild)	Observe, correct metabolites
Neutropenia <0.5 x 10^9/l (moderate)	Withdraw treatment. If febrile, consider admitting for G-CSF
Macrocytosis	Continue at current dose, no need to reduce or stop
Thrombocytopenia <150 x 10^9/l	Observe, if ongoing, screen for NRH
Anaemia	Check metabolites; exclude nutritional deficiencies or anaemia of chronic disease. If acute, exclude red cell aplasia

For mild-moderate abnormalities, discuss with patient's consultant before stopping or adjusting dose. Discuss with on call consultant if patient's consultant not available.

In all cases, when stopping or adjusting dose, inform patient's consultant via letter or email.

When to check thiopurine metabolites

All patients with symptoms of active disease.

TGN low	MeMP Normal	Increase dose
TGN low	MeMP high	LDTA/split dose
TGN normal	MeMP normal or high	Consider alternative treatment

GI side effects
Slower dosing increments
Switch to MP
Switch to LDTA

Pancreatitis
Stop thiopurine

Liver Toxicity
Switch to LDTA