

Open-label, unblinded, randomised, controlled investigator-initiated, multicentre study.

Adult patients with active moderate to severe UC steroid dependent/refractory with normal TPMT who achieved remission with steroids or infliximab were randomized to low dose azathioprine (L-AZA median dose 50mg) +allopurinol (ALLO) 100mg vs AZA monotherapy (median dose 200mg).

*IFX could be used up to week 26 at which time it had to be discontinued if in clinical remission.

Primary endpoints: Steroid and infliximab free remission at week 52

Results: N=89

- Remission at week 52, 43% L-AZA-ALLO vs 21% AZA, $p < 0.0048$.
- No differences were observed in endoscopic and histologic remission (endoscopic data only available of those who stayed on the therapy for 52 weeks)
- Drug withdrawal due to side effects occurred in 30% L-AZA-ALLO vs 38% AZA.
- Use of IFX before week 26 did not predict remission, $p = 0.602$

Conclusion:

L-AZA/ALLO therapy was associated with a beneficial effect on steroid and infliximab-free clinical remission in patients with moderate-to-severe UC.

Outcomes	AZA/ALLO n = 47	AZA n = 42	P value	Odds Ratio	95% CI
Primary outcome					
Remission	20 (43%)	9 (21%)	0.048	2.54	1.00–6.78
Secondary outcomes					
Total Mayo score < 3	22 (47%)	13 (31%)	0.034	1.54	1.01–2.36
Endoscopic Mayo 0	19 (41%)	8 (19%)	0.072	0.64	0.13–3.13
Histological score 0	16 (34%)	7 (17%)	0.362	2.00	0.45–8.98
6TGN Week 6	454 (341–568)	330 (207–412)	0.001		
6-TGN Week 52	475 (356–594)	303 (199–401)	0.001		
MeMP Week 6	246 (156–299)	3134 (1836–5987)	0.001		
MeMP Week 52	113 (66–267)	3305 (1334–6153)	0.001		
Calprotectin	121 (30–1210)	49 (30–1800)	0.757		
SIBDQ	57 (36–68)	55 (47–65)	0.621		
SHS	61 (14–279)	73 (27–117)	0.396		

Table 2: Primary and secondary outcomes in patients allocated to L-azathioprine (L-AZA)/ allopurinol (ALLO) versus AZA at week 52 (n = number of patients) in intention to treat analysis. The table shows the median (25th to 75th percentile) 6-thioguanine (TGN) and methylmercaptopurine (MeMP) levels (pmol/8 × 10⁸ RBC) at week 6 and week 52, calprotectin (mg/kg) at week 52 and the two health-related quality of life scores at week 52 short inflammatory bowel disease questionnaire (SIBDQ) and short health scale (SHS).

