

THERAPEUTIC DRUG MONITORING IN IBD

Target trough levels (µg/mL) by phase & phenotype

		Crohn's disease	Ulcerative colitis	Perianal CD fistulising
1	Infliximab	Induction wk 14 in all (wk 2 & 6 if high burden) Maintenance trough	>5¹ clinical remission 7–10 endoscopic healing	>5¹ clinical remission 7–10 endoscopic healing ASUC: 20–25 wk 2 · 10–15 wk 6 20–25 wk 2 · 10–15 wk 6^{1,3} early high-exposure targets >12.7 at wk 14 → fistula response
			>5–7¹ clinical remission No mucosal healing → intensify to ~10	≥10^{1,2} fistula healing some series ≥13
2	Adalimumab	Induction wk 4 in all Maintenance trough	≥5¹ clinical remission >10–12 endoscopic healing	≥6.4¹ clinical remission >10–12 endoscopic healing
			>10–12¹ clinical & endoscopic remission	No specific data >9.5¹ fistula closure >6.8 perianal healing
3	Certolizumab CD · FDA only	Induction wk 6 Maintenance trough	≥32^{1,3} clinical remission	Not licensed
			≥15³ clinical remission	Not licensed
	Golimumab UC only	Induction wk 6 Maintenance trough	Not licensed	≥2.5^{1,3} clinical response >3.2 clinical remission
			Not licensed	≥1^{1,3} clinical remission range 0.9–1.4
	Vedolizumab	Induction wk 2 · 6 · 14 Maintenance trough	>30 wk 2 · >24 wk 6 · >14 wk 14¹ reference values for clinical remission & endoscopic improvement no formal recommendation	No data
			TDM not recommended¹ insufficient evidence · levels in range do not rule out benefit from intensification reported target ≥12 ³	No data
	Ustekinumab	Induction wk 8 Maintenance trough	3.9 (2–7.3)¹ clinical remission >11.1 endoscopic remission	≥3.7¹ clinical response ≥3.5 endoscopic improvement
			1.5–3¹ clinical remission >4.5 endoscopic response · own level in remission = personal target	No data
	Risankizumab	No data yet		
	Mirikizumab	No data yet		
	Guselkumab	No data yet		
	JAK inhibitors tofacitinib · filgotinib · upadacitinib	Not applicable small molecules: no immunogenicity, no validated levels		
	S1P modulators ozanimod · etrasimod	Not applicable small molecules: no immunogenicity, no validated levels		

Always use the **same technique & laboratory** · targets are **assay-dependent** · stricter goals (endoscopic, histological, fistula healing) need **higher levels**^{1,2}

ASUC acute severe UC · CD Crohn's disease · UC ulcerative colitis · wk week

1. Rodríguez-Moranta F et al. GETECCU position statement on TDM of biologics in IBD. Gastroenterol Hepatol 2024;47:522–552. doi:10.1016/j.gastrohep.2024.01.007
2. Cheifetz AS et al. Expert consensus statement on TDM of biologics in IBD. Am J Gastroenterol 2021;116:2014–2025
3. Papamichael K et al. Appropriate TDM of biologic agents for patients with IBD. Clin Gastroenterol Hepatol 2019;17:1655–1668

