NZSG Quick Guide: IBD 2023 for Pharmac Biological Inflammatory Bowel Disease treatment in Aotearoa New Zealand

Quick Guide Table 1

Funded IBD biological therapies in Ao/NZ

Drug, route Loading dos Maintenand	е	Dose escalation	Therapeutic drug monitoring (TDM)	Requirement for co- immunomodulators (IMM)
Adalimumab (ADA) SC 160mg (4pens) stat, 80mg (2 pens) in 2 weeks 40mg sc (1 pen) Q fortnightly, first dose 2 weeks after induction		Partial response + end of dose effect with standard maintenance, Increase dose &/or reduce dosing interval. TDM to guide dose. Maximum 80mg Q1 weekly Deep remission + high trough levels consider dose reduction		Ideally, co-prescribe a thiopurine OR methotrexate (MTX) to reduce anti-drug antibodies and maintain efficacy
Infliximab (IFX) IV 5mg/kg at 0, 2, 6 weeks 5mg/kg IV Q8weekly		Partial response + end of dose effect with standard maintenance, Increase dose &/or reduce dosing interval TDM to guide dose. Maximum 10mg/kg Q4weekly trough > 7 - luminal Crohn's/UC trough > 20 - non-healing fistulating disease Deep remission + high trough levels (eg IFx >15), consider dose reduction		
Ustekinumab (UST) IV then SC Weight based IV induction 260mg (2 vials) <55kg 390mg (3 vials) 55-85kg 520mg (4 vials) >85mg 90mg sc (1 syringe) Q8weekly First dose 8 weeks after induction Vedolizumab (VDZ) IV 300mg IV fixed dose at 0, 2, 6 weeks		Liaise with Janssen for compassionate access Liaise with Takeda for compassionate access	TDM not currently available or recommended for VEDO/UST	These treatments are less immunogenic. Individualise IMM decision

Quick Guide Table 2
Unfunded IBD biological/small molecule therapies that will benefit Ao/NZ

Drug, route & Loading dose Maintenance	Target disease group	Potential benefit compared to existing medications	Key safety issues	Current availability in NZ
Upadacitinib (UPA) Oral 45mg daily for 12 wk 30mg daily maintenance	Moderate to severely active CD and UC	Significantly higher rates of clinical and endoscopic remission compared to placebo Targeting of additional pro-inflammatory pathways likely to be efficacious in primary and secondary non-responders to currently available classes of biologics Oral administration	Infection Hepatic dysfunction Caution for use in the elderly (> 65 years) Teratogenicity Vascular (DVT/PE + IHD)	Rheumatoid arthritis refractory to anti-TNF agents Pharmac considering options for severe atopic dermatitis Pharmac seeking clinical advice for ankylosing spondylitis, psoriatic arthritis
Infliximab (IFX SC) IV then SC IV - 5mg/kg at 0, 2, 6 wk SC - 120mg q2wkly IL-23 p19 inhibitors: Risankizumab (RIZ) Guselkumab (GUS) Mirikizumab (MIR) IV then SC Varying doses	Moderate to severely active CD and UC Moderate to severely active CD and UC	Ease, equity and infusion centre resource gains with SC administration Ease of SC administration Targeting of additional pro-inflammatory pathways likely to be efficacious in primary and secondary non-responders to currently available classes of biologics	As for IV infliximab Minimal safety issues on current phase 3 studies Infusion/injection reactions	Unavailable Pharmac seeking clinical advice Unavailable Pharmac comparing options for Risankizumab in psoriasis Pharmac seeking clinical advice for Guselkumab for psoriasis
S1P receptor modulators Ozanimod Etrasimod Oral Varying doses	Moderate UC	Targeting of additional pro-inflammatory pathways likely to be efficacious in primary and secondary non-responders to currently available classes of biologics Oral administration	Bradycardia Lymphopaenia Macular oedema Hepatic dysfunction	Unavailable

Quick Guide Table 3

Crohn's biological treatments: Order of preference & different groups

Order of preference	1	2	3	4	5
Bio-Naive Crohn's First line - 'never had a biological'	anti-TNF	*UST Not funded in NZ	VDZ		Clinical trials: Consider
Primary non response (PNR) to TNF therapy Second line – younger patient (<65 years) 'The TNF never worked'	UPA*	UST	RIZ/GUS/MIRI*	VDZ	suitability to increase therapeutic access
Primary non response (PNR) to TNF therapy Second line – older patient (>65 years) 'The TNF never worked'	UST	RIZ/GUS/MIRI*	VDZ	UPA (with caution)*	
Loss of response (LOR) to TNF therapy Second line 'Prior response to TNF but it stopped being effective'	2 nd TNF+IMM	UST/VDZ	UPA*	RIZ/GUS/MIRI*	
Aggressive disease in a younger patient <65y (Bio-Naïve)	anti-TNF	UPA*	UST	RIZ/GUS/MIRI*	
Age>65yo, safety concerns First or second line Diagnosis of cancer, elderly, complex infections	UST	VDZ	ADA/IFX		
Pregnancy and breastfeeding Check international guidelines. TNF, UST, VEDO widely prescribed and regarded as safe internationally. If a patient is established on one of these and stable, continue rather than change	TNF	UST/ VDZ	UST/ VDZ	Teratogen risk: NO small molecules NO MTX Data on RIZ/GUS/MIRI unknown	
Extra Intestinal Manifestations TNFs for EIMs Ustekinumab if co- existing psoriasis and possibly peripheral spondyloarthropathies (including enthesitis/dactylitis)	TNF	UST	UPA		
Perianal/ Fistulizing Crohn's First line	IFX (or ADA)	UST	UPA*		
Limited access to infusion centres	IFX SC*	UST	UPA*	RIZ/GUS/MIRI*	

 $[\]ensuremath{^*}$ not currently funded for this indication in Ao/NZ

Quick Guide Table 4:

UC biological treatments: Order of preference for different considerations

Order of preference	1	2	3	4
Bio-naïve UC First line: 'never had a biological'	IFX/VDZ	UST	UPA*	Clinical trials: Consider suitability to
Primary non responder (PNR) to TNF therapy Second line: 'The TNF never worked'	UST	VDZ	*Upadacitinib	increase therapeutic access
Loss of response (LOR) to TNF therapy Second line: 'TheTNF did work then it stopped being effective'	VDZ/UST	UPA*	RIZ/GUS/MIRI*	
Aggressive disease in a younger patient <65y (Bio-Naïve)	IFX	UPA*	UST/VDZ	
Aggressive disease in a younger patient <65y (TNF exposed)	UPA	UST/VDZ	RIZ/GUS/MIRI	
Age>65yo, safety concerns First or second line: Older, Diagnosis of cancer, infection, drug intolerance or contra-indication	VDZ	UST	anti-TNF	
Pregnancy and breastfeeding Check international guidelines. TNF, UST, VEDO widely prescribed and regarded as safe internationally	TNF	UST/VEDO	Teratogen risk: NO Small molecules NO MTX Data on RIZ/GUS/MIRI unknown	
Extra-intestinal manifestations (EIM)	IFX TNFs for EIMs especially axial articular manifestations and uveitis	UST Ustekinumab if coexisting psoriasis and possibly peripheral spondyloarthropathies (including enthesitis/dactylitis)	UPA*	
Acute severe ulcerative colitis (ASUC)	IFX	Ciclosporin IV IBD-centre	?UPA (data still being formulated)	
Limited access to infusion centres	IFX SC*	UST	UPA/RIZ/GUS/MIRI *	