

Supplementary Table 1. Current knowledge on infections that can be promoted by IBD drugs

Risk	Drug class	Specific type of infection	Patients at risk	Absolute excess risk level
Established	Thiopurines	Viral infections ^a	All patients Especially patients seronegative for EBV, CMV and VZV	Low
	Anti-TNF agents	Mycobacterial infections ^a	All patients Especially patients living in areas with high incidence of active tuberculosis	Low
		Bacterial infections ^a	All patients Especially older patients ^b	High in older patients
Still uncertain	Tofacitinib	Herpes zoster ^c	All patients Especially older patients, Asians and patients previously exposed to anti-TNFs ^c	High in subgroups at excess risk
	Anti-TNF agents	Post-operative infections ^d	Recurrent surgery ^d	
	Vedolizumab	Post-operative infections ^e		Conflicting data
Unknown	Methotrexate			Few data in IBD ^f but data in patients with rheumatoid arthritis suggest a modest increased risk ^g
	Ustekinumab			No data in IBD but data in patients with psoriasis arthritis suggest no increased risk ^h

IBD, inflammatory bowel disease; EBV, Epstein-Barr virus; CMV, cytomegalovirus; VZV varicella zoster virus;

^aData are from Kirchgesner et al ¹

^bData are from Borren et al.²

^cData are from Winthrop et al.³

^dData are from Brouquet et al.⁴ and Fumery et al.⁵

^eData are from Lightner et al.⁶ and Law et al.⁷

^fData are from Toruner et al.⁸

^gData are from Bernatsky et al.⁹

^hData are from Dommasch et al.¹⁰

References

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Supplementary Table2. Risk of cancer recurrence in the post-transplant state

Risk	Organ/type of cancer
Low (< 10%)	Incidental asymptomatic renal tumour Lymphomas Testicle Uterine cervix Thyroid
Intermediate (11 to 25%)	Uterine body Colon Prostate Breast
High (>25%)	Bladder Sarcoma Melanoma and non-melanoma skin cancer Myeloma Symptomatic renal carcinoma

Data are adapted from from Penn I. The effect of immunosuppression on pre-existing cancers. Transplantation 1993;55:742–747.

Supplementary Table 3. Choice of IBD drug according to first cancer

	Thiopurines	Anti-TNF agents	Methotrexate	Vedolizumab	Ustekinumab	Tofacitinib
EBV-related lymphomas	Contraindicated	Not recommended as first choice*	Not recommended as first choice*	OK**	OK***	Not recommended as first choice****
Non EBV-related lymphomas	Not recommended as first choice*	Not recommended as first choice*	OK**	OK**	OK***	OK
Basal-cell skin carcinoma	Contraindicated	OK**	OK**	OK**	OK***	OK
Squamous-cell carcinoma	Contraindicated	OK**	Contraindicated	OK**	OK***	OK
Melanoma	OK	Contraindicated	OK**	OK**	OK***	OK
Urinary tract cancers	Contraindicated	OK**	OK**	OK**	OK***	OK
Breast/Lung cancers	Not recommended as first choice*	OK**	OK**	OK**	OK***	OK
Digestive cancers	Not recommended as first choice*	OK**	OK**	Not recommended as first choice****	OK***	OK
Other cancers	Not recommended as first choice*	OK**	OK**	OK**	OK***	OK

IBD, inflammatory bowel disease

* Based on published safety signals (in IBD, rheumatology or post-transplant state)

** But no adequately powered study confirming the absence of risk

*** Based on the absence of safety signals in dermatology

**** Based on mechanistic concepts