

**Supplementary Table 1:** New Castle Ottawa Scale (NOS) of the included studies.

First Author	Study Design (Prospective or retrospective)	Notes on NOS domains in this study	New Castle Ottawa scale assessment (NOS)								
			Cohort studies								
			Selection				Comparability	Outcome			Quality Score
			Representativeness of the exposed cohort	Selection of the nonexposed cohort	Ascertainment of exposure	Demonstration that outcome of interest was not present at the start of the study	Comparability of cohorts based on the design or analysis	Assessment of outcome	Was follow-up long enough for outcomes to occur	Adequacy of follow-up of cohorts	
Dolinger 2020	Prospective cohort study with retrospective data analysis	Comparability Adjusted for Disease duration. Follow-up Period: at least 6 months? Adequacy of follow-up of cohorts: subjects lost to follow-up unlikely to introduce bias: small number lost < 5% ?	*		*	*	**	*	*	*	Good
Ryan 2023	Retrospective cohort study		*		*	*	**	*	*	*	Good
Koubek 2023	Retrospective cohort study		*		*	*	**	*	*		Good
Moore 2021	Retrospective cohort study		*		*	*	**	*	*	*	Good
Constant 2022	Retrospective cohort study		*		*	*	**	*	*	*	Good

**Search strategy:**

(tofacitinib OR Xeljanz OR JAK inhibitor OR Janus kinase inhibitor OR tofacitinib citrate OR Tasocitinib OR CP 690550) AND (Ulcerative colitis OR Colitis Gravis OR Idiopathic Proctocolitis OR Inflammatory Bowel Disease OR IBD OR UC OR Acute Severe Colitis OR ASC OR colitis) AND (child\* OR Pediatric\* OR minor\* OR youth OR juvenile\*)