European Crohn's and Colitis Organisation

DOP86: Risk for development of Inflammatory Bowel Disease under inhibition of interleukin 17 in psoriasis, psoriatic arthritis, ankylosing spondylitis and rheumatoid arthritis: A review and meta-analysis

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Disclosures:

Conflict of interest:

- Personal fees: AbbVie, MSD, Takeda, outside the submitted work

Background

increased risk of IBD in patients with IMIDs and targeted IL-17 inhibition

1. data from animal models[1,2]
2. disease deterioration of CD under treatment with SEC[3] and BRO[4]
3. cases from clinical trials[5] and case reports[6-8]

comprehensive analyses missing
- All approved compounds and
- All indications

[1]Ogawa A, Clin Immunol 2004
[2]Maxwell JR, Immunity 2015
[3]Hueber W, Gut 2012
[4]Targan SR, Am J Gastro 2016
[5]Reich K, J Am Acad Dermatol 2017
[6]Fobelo Lozano MJ, JCC 2018
[7]Ehrlich D, Case Rep Gastro Med 2018
[8]Vernero M, Am J Gastro 2018

Methods

Systematic review and meta-analysis

- indications: psoriasis, psoriatic arthritis, ankylosing spondylitis, rheumatoid arthritis
- Secukinumab, Ixekizumab, Brodalumab

Assessment of incident cases of IBD

‚best case' and ‚worst case' scenario

Results I

	Inflammatory bowel disease				
Induction treatment	**new diagnosis**		**relapse**		**total**
	wc	**bc**	**wc**	**bc**	
All anti IL-17 (n=14390)	11	3	1	9	12
Placebo (n=4989)	2	1	0	1	2
Active controls (n=2514)	0	0	0	0	0
Entire treatment					
All anti IL-17 (n=19380)	33	21	14	26	47
Placebo (n=1405)	2	2	0	0	2
Active controls (n=1672)	0	0	0	0	0

worst case (wc) and best case (bc) scenarios

Results II

	Inflammatory bowel disease				
	new diagnosis		relapse		total
Entire treatment	**wc**	**bc**	**wc**	**bc**	
Secukinumab (n=8372)	23	17	6	12	29
Placebo (n=1080)	2	2	0	0	2
Active control (n=893)	0	0	0	0	0
Ixekizumab (n=6481)	9	3	8	14	17
Placebo (n=214)	0	0	0	0	0
Active control (n=166)	0	0	0	0	0
Brodalumab (n=4527)	1	1	0	0	1
Placebo (n=111)	0	0	0	0	0
Active control (n=613)	0	0	0	0	0

Results III

Comparison anti IL-17 and placebo

- no difference in the pooled risk of new-onset IBD
- induction studies (wc) RD 0.0008 (95% CI: -0.0005, 0.0022)
- entire treatment (wc) RD 0.0022 (95% CI: -0.0010, 0.0055)

incidence rates of IBD in patients treated with anti IL17

- pooled incidence rate of 0.37 per 1,000 PY (95% CI: 0.12, 0.61) for the entire treatment period

Conclusions

- risk for development of IBD in patients with IMIDs treated with IL-17 antagonists is not increased compared to placebo
- high risk of IBD in the studied patient population
- Further prospective studies are warranted