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Background

Ulcerative colitis (UC) is a chronic idiopathic inflammatory bowel disease (IBD) of the colon that causes continuous mucosal inflammation starting in the rectum and extending to the more proximal colon, with variable extents.

Anti-TNF agents (ATAs) are generally the first-line biological therapy in UC patients who have failed treatment with corticosteroids and/or immunomodulators.

A systematic assessment of literature reporting discontinuation of ATAs in real-world setting is lacking.

Objective

We aimed to identify the medical and non-medical reasons for discontinuation of ATAs in real-world UC patients.

Methodology

A systematic literature review was conducted using comprehensive searches in Embase and Medline databases to identify real-world studies published in English during 2005–January 2022.

Studies were included if conducted in biological-naïve UC patients who initiated ATAs in first-line biological therapy, had ≥50 patients, and published as full manuscripts.

Exclusion criteria were mixed population, <50 patients, conference abstracts and non-English articles.

Results

Of the 2593 records retrieved from literature, 26 were included which provided 24 distinct studies. Illustrated the inclusion of the studies in PRISMA flow chart (Fig. 1).

These studies were from Europe (number of studies [n]=15), Japan (n=3), US, Canada, and Korea (n=2 each). The study design was retrospective (n=15) and prospective observational (n=8).

The follow-up duration ranged from 10 weeks to 5.8 years. Baseline characteristics were presented in Table 1.

The medical reasons for discontinuation of ATAs included adverse events [AEs] (n=21), primary non-response (PNR), loss of response [LOR] (n=8 each), worsening of UC (n=7), control of disease, lost to follow-up (n=3 each), issues related to drug dosing/administration, physicians' decision, and pregnancy (n=1 each). (Fig.2)^{1, 2, 4, 6, 8, 9}

The non-medical reasons for discontinuation of ATAs were patients' choice (n=5), administrative issues (n=2), finance/insurance-related, and location change (n=1 each). (Fig.3)^{3, 5, 7}

Conclusion

This review suggests that while AEs, PNR, LOR, and worsening of UC are predominant medical reasons, patients' choice is the main non-medical reason for discontinuation of ATAs among UC patients in real-world setting.

Conflict of interest

Gutta D, Gautam R, Prasanna R, Rai MK are employees of EVERSANA India.

References

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Table. 1 Baseline characteristics

Characteristic	
Study related (No. of studies):	
Treatments assessed:	
Adalimumab	6
Golimumab	3
Infliximab biosimilar	3
Infliximab originator	16
ATAs as group	3
Patient related:	
Age (median, range)	33-46 years
Gender ratio (% , range)	Male: 45-62
Disease duration (median, range)	3-8 years

Fig.1 PRISMA flow chart

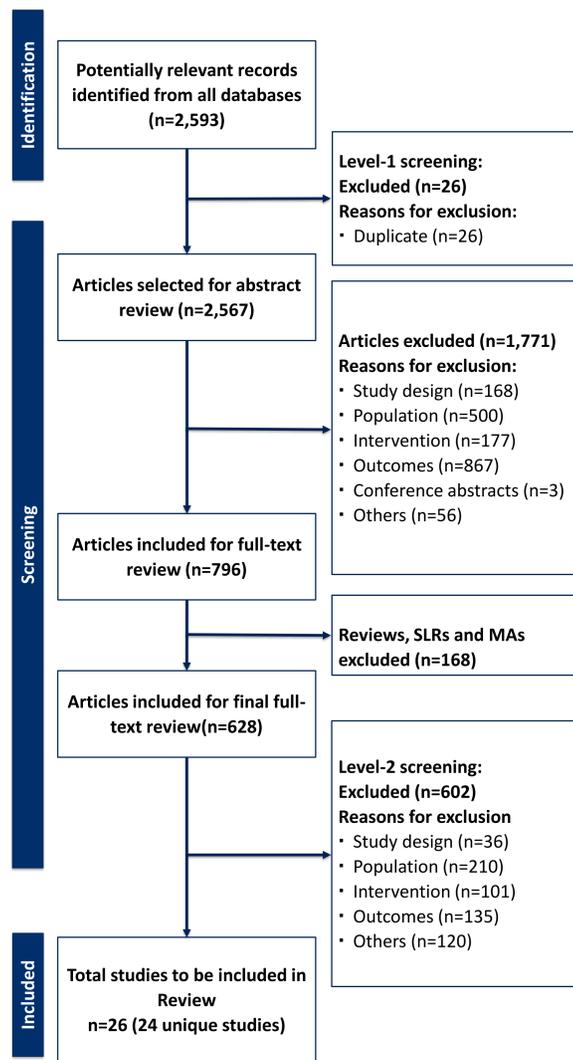


Fig. 2 Percent of patients with medical reasons for discontinuation of ATAs

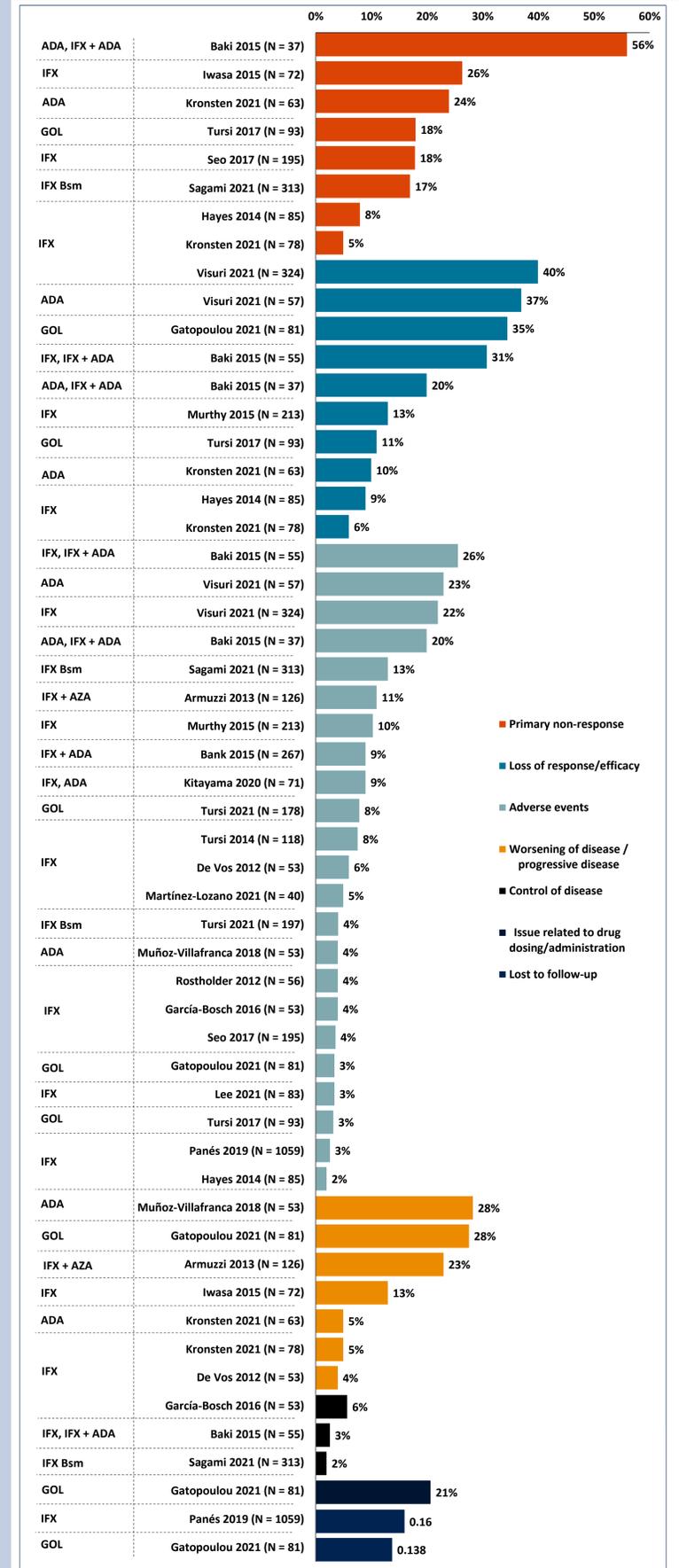
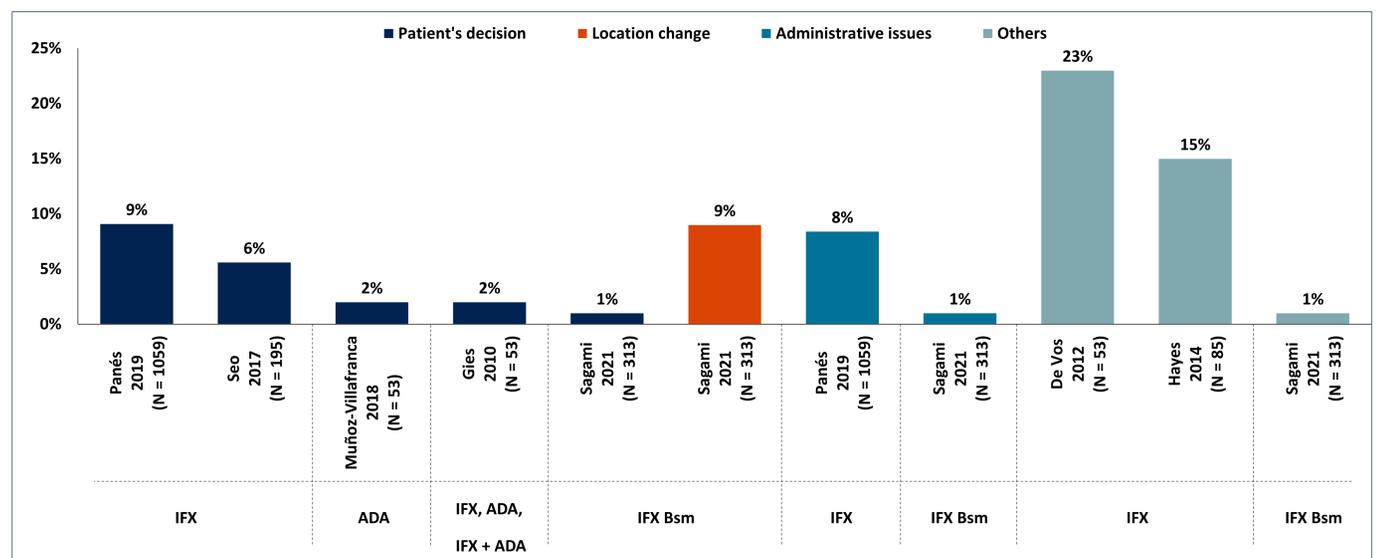


Fig. 3 Percent of patients with non-medical reasons for discontinuation of anti-TNF agents



Abbreviations

5-ASA – 5-Amino Salicylic Acid; ADA – Adalimumab; ADA Bsm – Adalimumab Biosimilar; AZA – Azathioprine; GOL – Golimumab; IFX – Infliximab; IFX Bsm – Infliximab Biosimilar.