

## ORT\_26 - Biologic Drugs Use In Inflammatory Bowel Diseases: A Systematic Review And Meta-Analysis

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**Introduction:** Global usage of biologics in IBD treatment is growing. These medications are vital for managing these diseases, improving patient quality of life, and reducing disease progression.

**Objectives:** To investigate the global prevalence of biological drug use for IBD and its potential geographic differences.

**Methodology:** This systematic review and meta-analysis included observational population-based (cohort, case-control, and cross-sectional) and administrative database studies, with data on the prevalence of biological medicine use in patients with IBD. Articles published up to March 22, 2023, in PubMed, Web of Science, Scopus, Embase, IBECs, WPRIM, BRISA/RedETSA, and LILACS databases were gathered. After extracting and assessing the data for methodological quality, estimates were combined using a random-effects meta-analysis. Cochran's Q test and I<sup>2</sup> were used to evaluate heterogeneity. This research was registered in PROSPERO under the ID CRD42023396498.

**Results:** Of 7,758 titles, 65 (including 3,288,772 patients) were selected for inclusion. Since 2017, a notable increase in the number of studies on this subject has been observed, primarily in high-income countries. The prevalence of biologics use in inflammatory bowel diseases worldwide was found to be 16.69% (95%CI 12.53- 20.86%), with a significant concentration in the use of anti-TNF agents (15.78%; 95%CI 10.58-20.98%). Additionally, Crohn's disease patients had a higher prevalence of biologics use (21.55%; 95%CI 16.32-26.79%) than ulcerative colitis patients (9.70%; 95%CI 6.10-13.31%). In terms of region, patients with IBD in South America showed a higher prevalence of biological treatments (22.29%; 95%CI 13.07-31.51%). The use of anti-TNF medication was also high in South America (23.81%; 95%CI, 2.05-45.56%), which is similar to the general analyses. The same pattern of higher use of biologics and anti-TNF agents in South America was observed in analyses restricted to Crohn's and ulcerative colitis patients.

**Conclusion:** Additional research utilizing population-based data and/or administrative databases, while stratifying analyses by inflammatory bowel disease subtype, is necessary to validate our findings. Future studies should be conducted in regions, such as Latin America, Asia, and Africa.

**Keywords:** Inflammatory Bowel Diseases; Biologic Drug; Systematic Review