

## **BIO\_15 - Use of biological drugs for inflammatory bowel disease in the Brazilian Northeast region (2008- 2021)**

Caroline Tianeze de Castro<sup>2</sup>; Felipe Gabriel Assunção Cruz<sup>3</sup>; Roberto Carreiro<sup>1</sup>; Mauricio Lima Barreto<sup>1</sup>; Carlos Antonio de Souza Teles Santos<sup>1</sup>; Djanilson Barbosa dos Santos<sup>3</sup>.

<sup>1</sup>CIDACS/Fiocruz Bahia

<sup>2</sup>Universidade Federal da Bahia - UFBA

<sup>3</sup>Universidade Federal do Recôncavo da Bahia - UFRB

**Introduction:** Inflammatory bowel disease (IBD) prevalence has been growing worldwide, which generates a great demand for drugs essential for clinical remission and improving patients' quality of life. In Brazil, access to medicines for IBD treatment is provided free of charge by the Unified Health System (SUS, in Portuguese), which has an essential role in guaranteeing access to biological medicines for the treatment of IBD.

**Objectives:** To describe population characteristics and biological drug use patterns in patients with IBD in the Brazilian Northeast region.

**Methodology:** Data from patients with IBD (Crohn's disease and ulcerative colitis) in the SUS Outpatient Information System (SIA/SUS, in Portuguese), an administrative database, between January 2008 and December 2021 were analyzed. Socioeconomic characteristics, IBD type, and medication used were analyzed. Absolute and relative frequencies were estimated for each variable per year. Proportions of biological drug use were stratified by sex, age, and IBD type.

**Results:** In the analyzed period, 665,537 prescriptions for IBD by the SUS were evaluated. The population of northeastern Brazil with IBD was mostly adults (81%), women (59.4%), brown/mixed (38.4%), and the more frequent IBD was ulcerative colitis (62.5%). Regarding pharmacotherapy, biological drugs (adalimumab; certolizumab pegol; infliximab; and vedolizumab) accounted for 13.2% of the prescriptions in IBD patients. There was an increase in the use of biological drugs from 3.1% in 2008 to 15.9% in 2021. From 2008 to 2017, higher rates of infliximab prescription were found (3.1% to 7.6%), whereas higher rates of adalimumab prescription were observed from 2018 to 2021 (6.6% to 7.1%). The same pattern was observed in the stratified analyses.

**Conclusion:** An increase in biological drug use through the years was observed, possibly related to the better performance of these drugs in inducing and maintaining IBD remission. Furthermore, the increase in the use of adalimumab over infliximab in recent years may be associated with greater freedom caused by adalimumab subcutaneous administration. Data on the medication use profile of patients attending SUS is important to contribute to the development of strategies that encourage access to pharmacotherapy to reduce the burden of the diseases.

**Keywords:** biological agents, inflammatory bowel disease, SUS