ADVERSE DRUG REACTIONS DURING BIOLOGIC THERAPY IN INFLAMMATORY BOWEL DISEASE: REAL LIFE DATA FROM THE PHARMACOVIGILANCE PROJECT IN CALABRIA AND SICILIA REGIONS

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Introduction: Inflammatory bowel disease (IBD) is characterized by both acute and chronic inflammation of the gastro-intestinal (GI) tract that affect a large and growing number of people worldwide. Biologic agents represent a significant progress for the treatment of IBD. With their large use in real life, the post-marketing pharmacovigilance role becomes crucial for monitoring the long-term safety of these drugs. Aim of this project was to prospectively evaluate adverse drug reactions (ADRs) in IBD patients treated with biologics in Calabria and Sicilia Regions.

Material and methods: An observational prospective study was conducted. Since January 2017to December 2018, we collected data from Crohn's Disease (CD) and Ulcerative Colitis (UC) patients treated with biologics, afferent to the gastroenterology units of "Mater Domini" University Hospital and "Pugliese-Ciaccio" Hospital of Catanzaro, "San Giovanni di Dio" Hospital of Crotone, "Annunziata" Hospital of Cosenza, "Bianchi-Melacrino-Morelli" Hospital of Reggio Calabria and "G. Martino" University Hospital of Messina. Prior informed consent, patients were interviewed every three months to verify the occurrence of ADRs. Patients were monitored for a period of 3to 24months. Demographic, clinical data and ADRs were recorded. ADRs were considered severe according to national and international criteria (e.g. when life threatening; resulting in hospitalization).

Results: We enrolled 642patients, 56% affected by CD and 44% by UC. Mean age was 44.5(range: 17-86) years and just over half (60%) were male. Mean age at diagnosis was 33years and the median disease duration was 9.5years (range: 1-36). Patients were treated as follow: 43% by infliximab, 35% by adalimumab, 18% by vedolizumab and 4% by golimumab. There were 279ADRs, 11% considered serious and 89% not serious. The higher frequency of ADRs occurred with the administration of infliximab (125/279; 45%), followed by adalimumab (92/225; 41%), vedolizumab (44/113; 39%), golimumab (18/25; 72%). The majority of severe ADRs occurred in patients treated with golimumab (4/18; 22%). Severe ADRs occurred more frequently in patients treated with adalimumab (61%). According to MedDRA Coding, general disorders and administration site conditions (ineffective response to the drug, asthenia, legs' edema, weakness and abnormal sweating) were the most frequent cause of ADRs (40%), followed by skin and subcutaneous tissue disorders (13%), infections (8%), respiratory disease (7%), musculoskeletal reaction (6%) while the remaining 11% was represented by miscellanea reactions. Drug was discontinued in 13% of patients due to the occurrence of ADRs, but none of the ADRs had fatal outcome.

Discussion and conclusions: In this real-life cohort of IBD patients treated with biologics, ADRs are frequent but not severe in the majority of cases. Infliximab was the most used drug (43%) and caused more ADRs (45%), however, the majority of ADRs and severe ADRs were registered during golimumab (22%, 72%) respectively. Therefore, safety profile of biologic agents in IBD setting needs to be characterized in real life through continuous pharmacovigilance reporting.