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

Giovambattista De Sarro[1], Valeria Papaianni[2], Maria Antonietta Barbieri[2], Luigi Bennardo[1], Stefano Dastoli[1], Maria Diana Naturale[1], Eugenio Donato di Paola[1], Valeria Papaianni[2], Serafinella Patrizia Cannavò[2], Paola Maria Cutroneo[2], Edoardo Spina[2], Emilio Russo[1]

[1]Department of Health Science, University Magna Graecia of Catanzaro, Catanzaro - Italy, [2]Department of Clinical and Experimental Medicine, University of Messina, Messina - Italy

Introduction: The introduction of biologics resulted in a significant advance in the treatment and understanding of the pathogenesis of many immune-mediated inflammatory diseases, representing, nowadays, the new therapeutic frontier for the treatment of these pathologies. Recently, an increase in the use of biological drugs and their use in combination with traditional drugs has become more frequent considering the primary therapeutic goal to obtain the remission of the disease and improving the patient's quality of life. However, biologics have been associated with significantly higher rates of overall adverse drug reactions (ADRs) and consequent treatment discontinuation than traditional therapy. Aim of this study was to evaluate the incidence of ADRs associated with biologics use in patients with dermatological diseases.

Materials and methods: We enrolled patients treated with biologics afferent to the dermatology units of "Mater Domini" University Hospital of Catanzaro, "Pugliese-Ciaccio" Hospital of Catanzaro, "San Giovanni di Dio" Hospital of Crotone, "G. Martino" University Hospital of Messina and "Bianchi-Melacrino-Morelli" Hospital of Reggio Calabria, since January 2017to December 2018. 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 714patients with the following characteristics: 40.5% females; most (53%) represented age range was 41-60 year (36% >61vs 11% <40); 40% affected by psoriatic arthritis, 55% affected by psoriasis and 5% affected by psoriatic arthritis and psoriasis. Overall 32% of patients received adalimumab, 22% ustekinumab, 25% etanercept, 10% secukinumab, 4.5% golimumab, 4.5% infliximab, 1% ixekizumab, 0.1% respectively brodalumab and guselkumab. There were 95therapeutic switches due to the occurrence of an ADR. Data analysis showed the detection of 180 ADRs in 268patients. The higher frequency of ADRs occurred during adalimumab treatment (58/230; 25.2%), followed by etanercept (39/182; 21.5%) and ustekinumab (39/156; 25%), secukinumab (22/71; 31%), golimumab (15/32; 47%), infliximab (6/33; 18%), ixekinumab (1/8; 12.5%). 11% of ADRs were considered severe, 89% not serious. The majority of ADRs occurred in patients between 41and 60 years (102/380; 27%). Serious ADRs occurred during etanercept treatment (42%). ADRs observed were: inefficacy (74), asthenia (19), laboratory parameters alterations (18), gastrointestinal disorders (13), loss of effectiveness (11), skin disorders (14), injection site reaction (6), respiratory disease (6), allergic reactions (6), cancer (4), candidiasis (5), headache (2), uveitis (1) and one case of myocardial infarction with consequent death.

Discussion and conclusions: Overall these drugs appear relatively safe, although are some serious ADRs such as increased risk of cancer and infections have been reported. The number of lack of efficacy ADRs is very high and this should be considered as a topic for new research projects. A better definition of the patients and biomarkers for patient's selection are probably needed. Finally, considering their effects on immune system, long-term effects should be considered and adequate studies programmed.