Abstract number: **5PSQ-174**

ATC code: **L04 - Immunosuppressive agents**

EFFECTIVENESS AND SAFETY OF ABATACEPT THERAPY IN PATIENTS WITH RHEUMATOID ARTHRITIS AFTER PREVIOUS FAILURE WITH TNFi TREATMENT

N. Márquez Pete [1], M.D.M. Maldonado Montoro [2], C. Pérez Ramírez [3], A. Espinosa Rodríguez [4], A. Jiménez Morales [4].

[1] Pharmacy Service. Pharmacogenetics Unit, University Hospital Virgen De Las Nieves, Granada, Spain. [2] Clinical Analysis Service, University Hospital Clinico San Cecilio, Granada, Spain. [3] Pharmacy Service. Pharmacogenetics Unit, University Hospital Virgen Macarena, Sevilla, Spain [4] Pharmacy Service, University Hospital Virgen De Las Nieves, Granada, Spain.

Background and importance

ABATACEPT (ABA) is a soluble fusion protein consisting of the extracellular domain of human CTLA-4 linked to a modified Fc portion of human IgG1, used in rheumatoid arthritis (RA) in patients with an inadequate or unsustained response to tumor necrosis factor inhibitors (TNFi).

Aim and objectives

The aim of this study was to investigate the **effectiveness and safety of ABA, at 12 months**, in patients diagnosed with RA.

Results

171 RA patients have been evaluated; 74.27% was women (127/171), age at ABA start was 58.40±13.60 years old and the administration was intravenous (iv) in 61.40% (105/171) patients. Concomitants glucocorticoids were administrated in 84.21% (144/171) cases and disease-modifying anti-rheumatic drugs (DMARDS) (methotrexate or leflunomide) in 50.87% (87/171) patients. Rheumatoid factor (RF) was positive in 78.36% (134/171) patients and cyclic citrullinated peptide antibodies (ACPA) in 72.51% (124/171). 75.44% of the patients had been treated previously with TNFi and only 24.56% was naïve for biologic therapy. **EULAR response after 12 months** of ABA treatment was **satisfactory in 48.94%** (69/141) patients. **Clinical remission (DAS28<2.6) at 12 months** was **28.37%.** The bivariate analysis revealed **higher EULAR response** in patients with **lower HAQ score** (OR=0.22; $CI_{95\%}$=0.06-0.66; p=0.012), **EVAP** (OR=0.94; $CI_{95\%}$=0.89-0.98; p=0.014) and lower **DAS28 score** (OR=0.45; $CI_{95\%}$=0.20-0.84; p=0.025) at the beginning. The incidence of **adverse events** was **12.87% and 7.80%,** after 6 and 12 months, respectively. 26.90% leaved ABA before 6 months due to ineffectiveness **and 71.63% followed therapy after 12 months.**

Variable	N	%
Women	127/171	74.27
Age ABA start	171	58.40±13.60
Adm. intravenous (iv)	105/171	61.40
Concomitants glucocorticoids	144/171	84.21
Concomitants DMARDs	87/171	50.87
RF positive	134/171	78.36
ACPA positive	124/171	72.51
Previous TNFi	129/171	75.44
Naive BT	42/171	24.56

Table 1. *Patients characteristics*

Material and methods

Retrospective cohorts study. Patients diagnosed as rheumatoid arthritis treated with abatacept between 2009 and 2019. Socio-demographic, clinical and pharmacological characteristics of patients were collected. The influence of clinical parameters on ABA effectiveness was evaluated applied linear or logistic regression models. The effectiveness was measured according to The European League Against Rheumatism (EULAR) response (satisfactory or unsatisfactory), after 12 months of therapy in RA patients. Safety was assessed by adverse events.

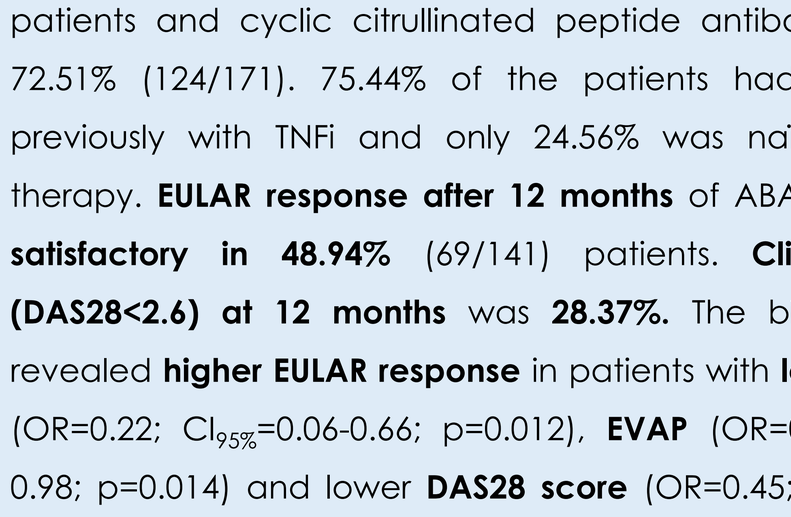

Figure 1*. Flow chart of the study population and incidence of adverse events*

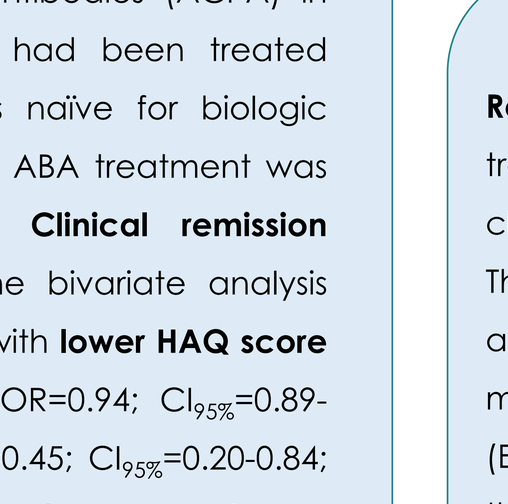

Figure 3*. Predictors high EULAR response in patients with ABA treatment*

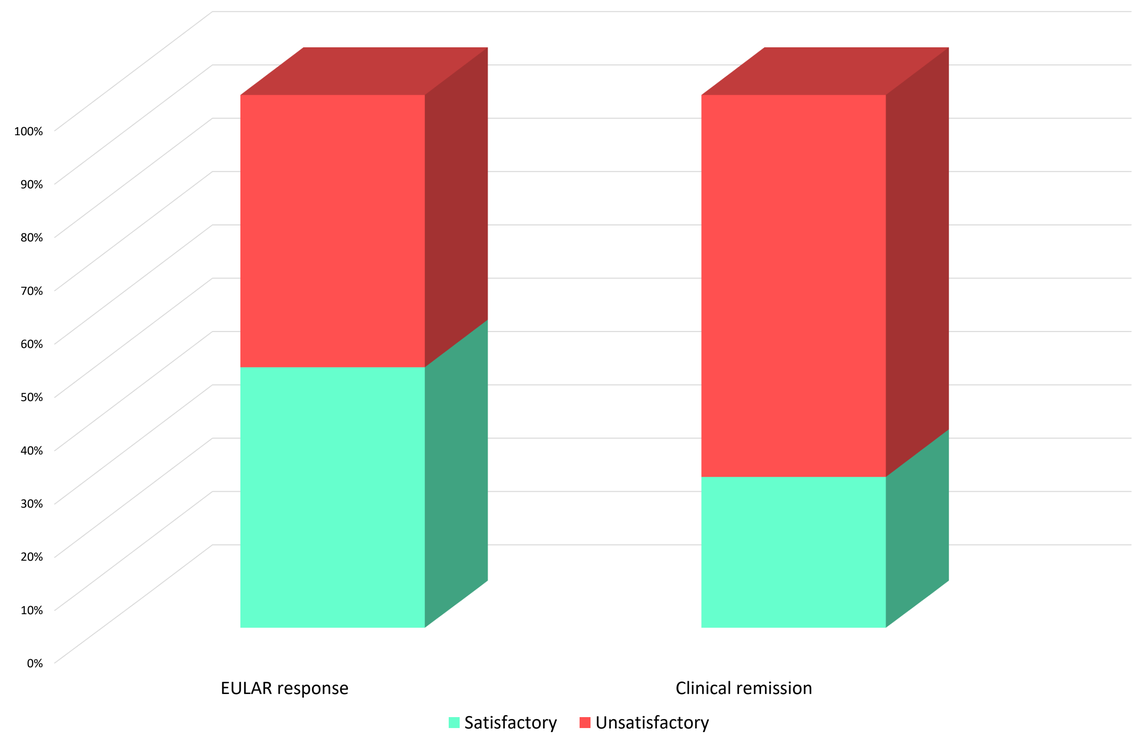

Figure 2*. Effectiveness after 12 months of ABA treatment.*

Conclusion and relevance

In conclusion, abatacept exhibited **good effectiveness and safety in RA patients**, some of whom had failed to respond to previous TNFi treatment.

noeliamarquezpete@gmail.com