



POSTER PRESENTATION

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# Influence of variants of Fcg receptor IIA on the European league against rheumatism responses to anti-tumour necrosis factor alpha therapy in psoriatic arthritis

J Ramirez<sup>1\*</sup>, J L Fernandez-Sueiro<sup>4</sup>, R Lopez<sup>2</sup>, C Montilla, B Suarez<sup>2</sup>, C Moll<sup>1</sup>, R Rodriguez<sup>2</sup>, F Blanco<sup>4</sup>, M Alsina<sup>3</sup>, R Sanmarti<sup>1</sup>, F Lozano<sup>2</sup>, J Cañete<sup>1</sup>

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## Introduction

The efficacy of biological therapies currently used in psoriatic arthritis depends not only on their blocking effect on the targeted molecule but also on the affinity of genetically defined variants of the Fc-gamma receptors for the constant portion (Fc fragment of IgG1).

## Aim

To determine whether polymorphisms in Fc-gamma receptor IIA influence clinical efficacy in patients with psoriatic arthritis treated with tumor necrosis factor alpha inhibitors.

## Patients and methods

The study population comprised 110 patients (52.7% males and 47.3% females) with psoriatic arthritis refractory to 15 mg or more of methotrexate/week. Infliximab (33.6%), etanercept (50.9%) or adalimumab (15.5%) were initiated, and patients were evaluated after 12 and 24 weeks using the EULAR response criteria. Genotyping of FCGR IIA-H131R polymorphism was performed by allele-specific PCR and PCR sequence-based typing. The chi-square test was used to compare response rates across Fc-gamma receptor IIA genotype.

## Results

No significant differences were found at 12 and 24 weeks in EULAR responses between patients with high affinity alleles (FCGRIIA HH/HR) and patients with low

affinity alleles (FCGRIIA RR) (Tables 1 and 2). However, there was a trend to a better response among patients with high affinity alleles.

## Conclusion

These results suggest that FCGR IIA-H131R polymorphism has low influence in the clinical efficacy of anti-TNF therapies in patients with psoriatic arthritis. Although different to previously reported results in rheumatoid arthritis [1], these results can be explained because of the better and more prolonged response to anti-TNF therapy in psoriatic arthritis than in rheumatoid arthritis. In addition, in this study we analyzed patients with three different anti-TNF-alpha therapies.

**Table 1 12 weeks EULAR Response FCGRIIA**

	HH+HR	RR	Total
Null (%)	10.1	26.3	13.3
Moderate (%)	27.8	10.5	24.5
Good (%)	62.0	63.2	62.2

p = 0.086.

**Table 2 24 weeks EULAR response FCGRIIA**

	HH+HR	RR	Total
Null (%)	8.9	26.3	13.3
Moderate (%)	27.8	15.8	25.5
Good (%)	63.3	57.9	62.2

p = 0.090.

<sup>1</sup>Rheumatology, Hospital Clinic, Barcelona, Spain  
Full list of author information is available at the end of the article

#### Author details

<sup>1</sup>Rheumatology, Hospital Clinic, Barcelona, Spain. <sup>2</sup>Immunology, Hospital Clinic, Barcelona, Spain. <sup>3</sup>Hospital Clinic, Barcelona, Spain. <sup>4</sup>Rheumatology, Complejo Hospitalario Juan Canalejo, La Coruña, Spain.

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1. Cañete JD, *et al.*: *Ann Rheum Dis.* 2009, **68**:1547-52.

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