THE EFFECTIVENESS OF JANUS KINASE INHIBITORS IN MODERATE TO SEVERE ACTIVE RHEUMATOID ARTHRITIS

SANT PAU
Campus Salut
Barcelona

C. Martinez-Molina[1,2], H. Corominas[2,3], C. Diaz-Torne[2,3], H.S. Park[2,3], S. Ojeda[1], A. Feliu[1], S. Vidal[2,4]

[1]Department of Pharmacy, Hospital de la Santa Creu i Sant Pau, Barcelona, Spain.
[2]Department of Medicine, Universitat Autònoma de Barcelona, Barcelona, Spain.
[3]Department of Rheumatology and Systemic Autoimmune Diseases, Hospital de la Santa Creu i Sant Pau, Barcelona, Spain.
[4]Group of Inflammatory Diseases, Sant Pau Biomedical Research Institute, Barcelona, Spain.

4CPS-113
ATC: L04

Background and importance

To date, there is limited real-world data assessing the influence of **rheumatoid arthritis (RA)** disease activity on the effectiveness of **Janus Kinase inhibitor (JAKi)** treatment.

Aim and objectives

To evaluate **the influence of RA disease activity on the effectiveness of JAKi treatment**.

Materials and methods

An observational retrospective study (2017/9-2023/9), including RA patients treated with **tofacitinib, baricitinib, upadacitinib,** or **filgotinib** at a tertiary hospital.

Treatment retentions, for the discontinuation reason of lack of effectiveness, were examined:

- The **Cox model** was applied to analyze the disease activity (DAS28-CRP) as a potential predictive factor that could influence treatment retention.
- The **Kaplan-Meier estimate** was used to evaluate treatment retention curves, with the **log-rank test** employed for comparison.

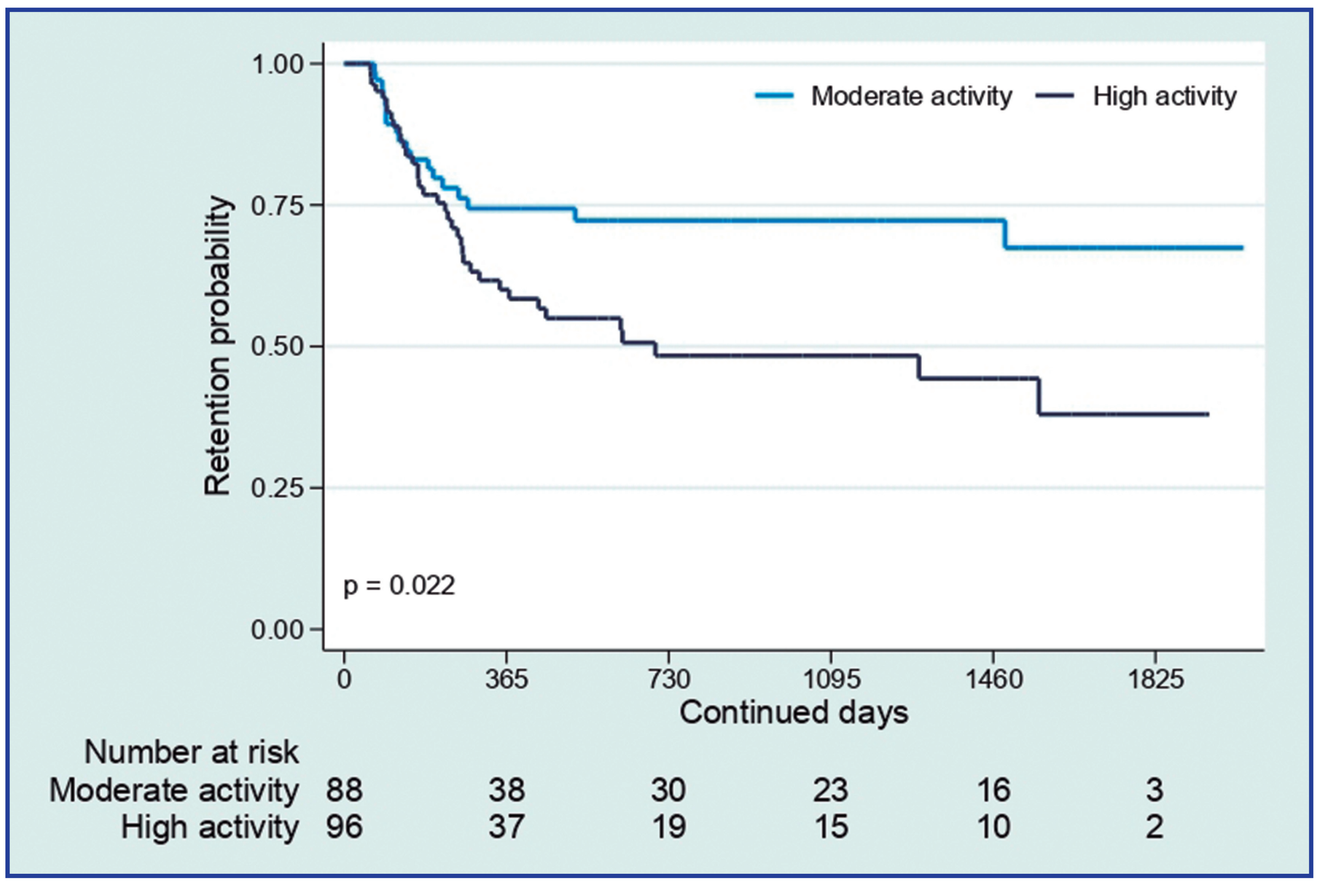
Results

184 JAKi treatments, corresponding to 123 RA patients (86% women, 63±13 years old).

At JAKi treatment initiation, RA disease activities were: moderate activity (47.8%) and high activity (52.2%).

High activity significantly increased the risk of treatment discontinuation due to lack of effectiveness (HR: 1.91; p=0.025). Discontinuation rates due to lack of effectiveness were greater for high activity compared to moderate activity (*p*=0.022; Figure 1).

Figure 1. JAKi treatment retention due to lack of effectiveness



Conclusion and relevance

Our findings suggest statistically significant differences in the influence of high RA disease activity compared to moderate activity on the effectiveness of JAKi treatment. A high activity was significantly linked to an increased risk of treatment discontinuation due to lack of effectiveness.