
**Abstract N°:** ID-1424

**Topic:** Psoriasis

## Influence of Prior Biologic Therapy on Response to Tildrakizumab: A Comparative Subgroup Analysis in a Tertiary Care Center

Lourdes Rodriguez Fernandez-Freire*[1], García-Núñez Alonso[1], Franco Moralo Lucas[1], Roman Barabash Neila[1, 1], Jose Juan Pereyra Rodriguez[1]

[1]Virgen del Rocío University Hospital, Sevilla, Spain

### Introduction

Psoriasis is a chronic and recurrent inflammatory disease. Proinflammatory cytokines and IL23/Th17 axis play critical roles in psoriasis pathogeny. There are multiple therapeutic options available for the treatment of psoriasis, which are broadly classified into four categories: tumor necrosis factor (TNF)-α inhibitors, interleukin (IL)-12/23 inhibitors, IL-17 inhibitors, and IL-23 inhibitors. Tildrakizumab (TDK) is a humanized monoclonal IgG1/κ antibody that, belonging to the latter group, selectively binds to the p19 subunit, inhibiting the interaction of IL-23 and thus inhibits the release of IL-23 mediated proinflammatory cytokines.

### Materials and Methods

This single-center retrospective study included 50 patients affected by moderate-to-severe plaque psoriasis treated with TDK from February 2020 to March 2025. TDK was administrated according to the summary of product characteristics. The cohort was divided into three groups according to treatment received prior to the initiation of TDK. Assessment criteria encompassed Psoriasis Area and Severity Index (PASI) at 0, 12, 24, 52, 72, 104 and 156 weeks. Linear mixed-effects models were used to assess the longitudinal evolution of PASI scores. Intergroup comparisons at each visit were performed using Welch's t-test for independent samples. Statistical significance was set at $p < 0.05$.

### Results

Our population is composed of 50 patients with moderate-to-severe psoriasis treated with TDK. 10 (20%) patients initiated treatment without prior exposure to any biologic therapy, whereas 30 (60%) had previously received TNF-α inhibitors and 9 (18%) had been treated with IL-17 inhibitors. The longitudinal evolution of mean PASI scores was assessed, with particular attention to intergroup differences at weeks 24 and 52. The naïve group showed the greatest and most rapid clinical improvement, with a reduction in PASI from 12.8 ± 3.68 at baseline to 1.23 ± 1.17 at week 12 (−90%) and 0.8 ± 1.14 at week 24 (−94%), maintaining values close to remission throughout follow-up. The anti-TNF group demonstrated an intermediate response (10.30 ± 4.17 at baseline to 2.67 ± 3.43 at week 24; −74%), whereas the group previously exposed to IL-17 inhibitors showed a slower decline and greater variability (9.56 ± 4.72 at baseline to 4.57 ± 5.13 at week 24; −36%). In cross-sectional comparisons at each visit, at week 24 the naïve group exhibited significantly lower PASI scores than the anti-TNF group (0.8 vs 2.67; $p \approx 0.04$) and a trend toward lower values compared with the IL-17 group (0.8 vs 4.57; $p \approx 0.07$). No significant differences were observed between the anti-TNF and IL-17 groups. By week 52, mean PASI scores converged (0.8 vs 1.7 vs 1.0, respectively), with no statistically significant differences among groups.

### Conclusions

The use of Tildrakizumab in biologic-naïve patients demonstrated a faster and greater clinical response compared with patients previously treated with anti-TNF and/or IL-17 inhibitors, with attenuation of intergroup differences over the medium term.