

# Budget impact analysis of biologic drugs according to persistence in the treatment of psoriasis and psoriatic arthritis in the Balearic Islands

EE236



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## INTRODUCTION

Psoriasis and psoriatic arthritis (PsA) are chronic inflammatory conditions treated with biologics such as TNF- $\alpha$  inhibitors, IL-12/23, IL-17, and IL-23. **Spanish National Health System prioritizes anti-TNF drugs over interleukins.**

## OBJECTIVE

**To assess the budget impact of biologic medications on biologic-naïve patients with moderate-to-severe psoriasis or PsA in the Balearic Islands from the perspective of the Spanish National Health Service (SNS).**

## METHOD

### Retrospective study

6 public hospitals in the Balearic Islands  
From January 2018 to December 2023

### Recorded variables

Age, sex and diagnosis

### Inclusion criteria

Patients aged 18+  
Moderate-severe psoriasis and/or PsA  
Naïve to biologics (least 4 months of treatment)

### Persistence calculation

From the first to the last dispensation plus the interval to the next administration

Kaplan-Meier survival analysis compared 36-month persistence rates among different targets.

### Budget impact calculation

At 3 years  
Treatment persistence and potential second-line treatment

Comparison of real prescription against SNS prioritization

Annual cost calculation: Average number of pharmaceutical forms dispensed + treatment duration + purchase costs as of May-2024

### Statistical analysis

R software

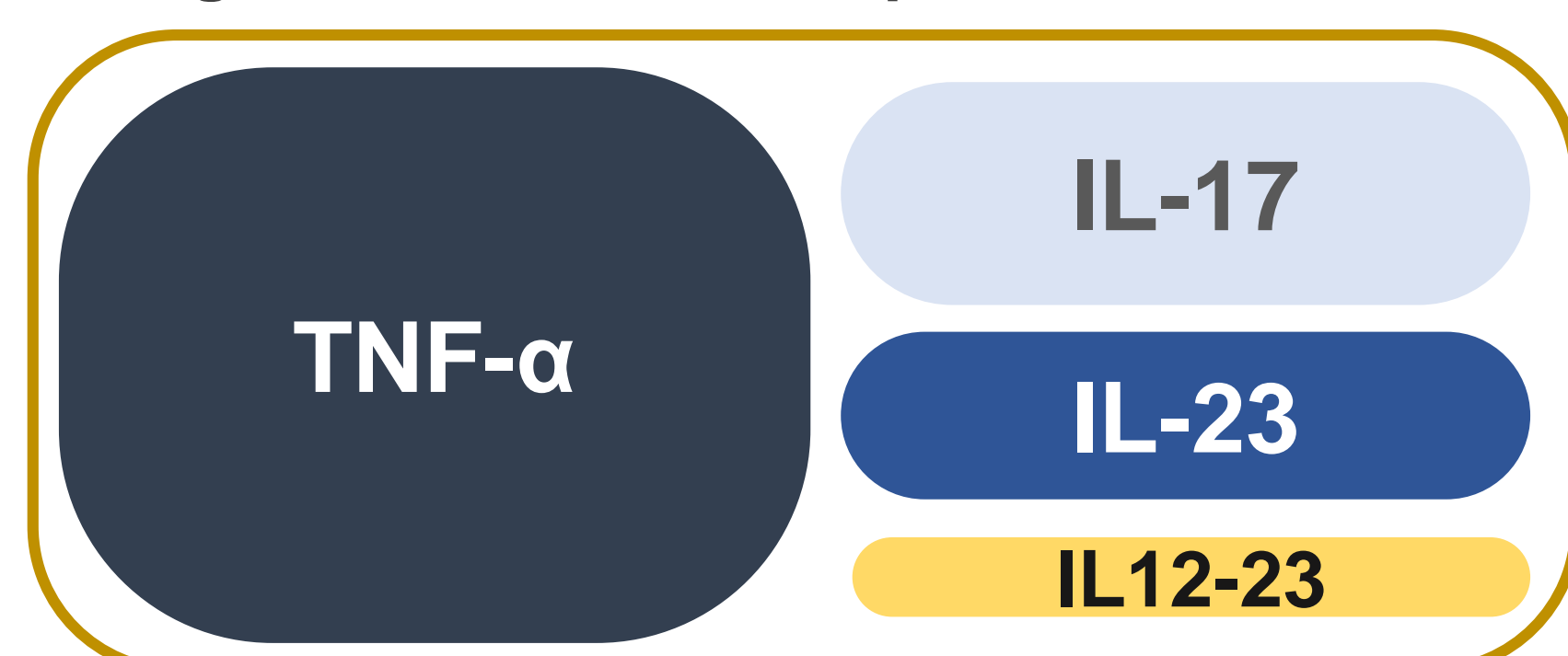
## RESULTS

### Demographic characteristics

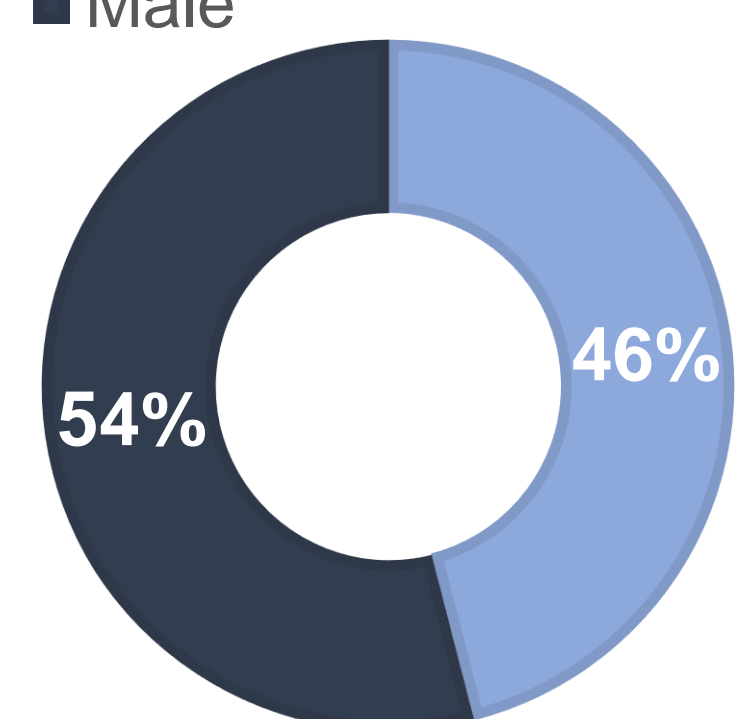
Mean age: 53 years old (SD 13.39)

986 patients evaluated

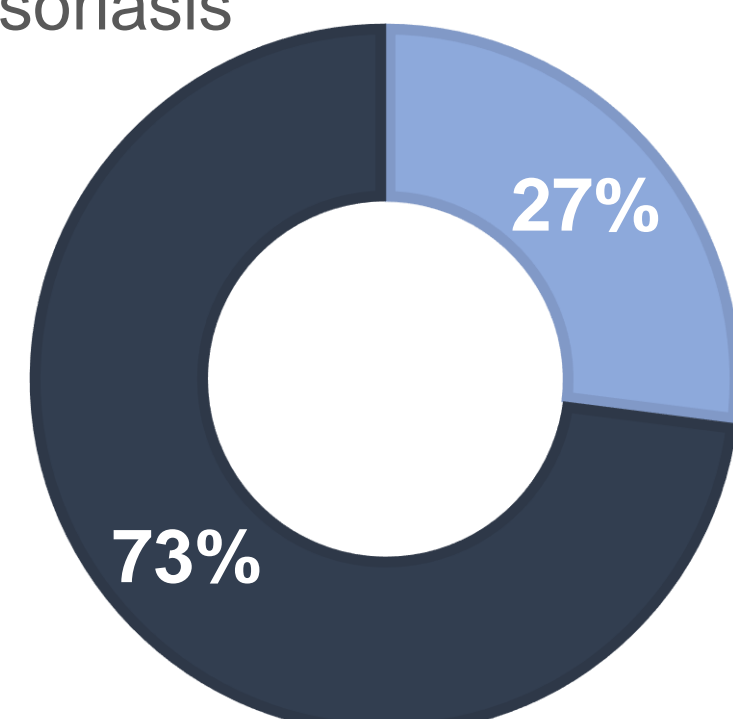
Target selected in naïve patients:



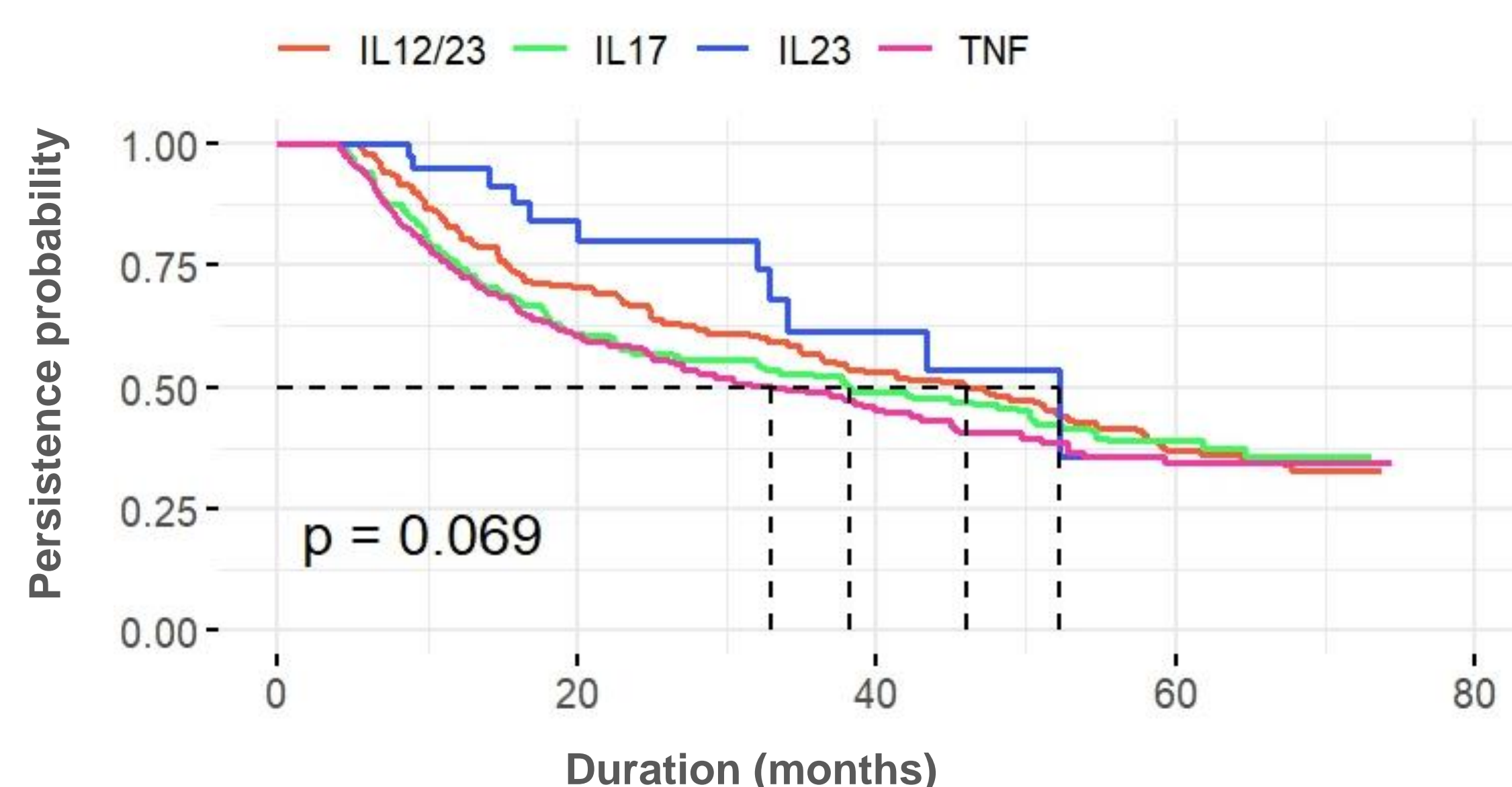
■ Female  
■ Male



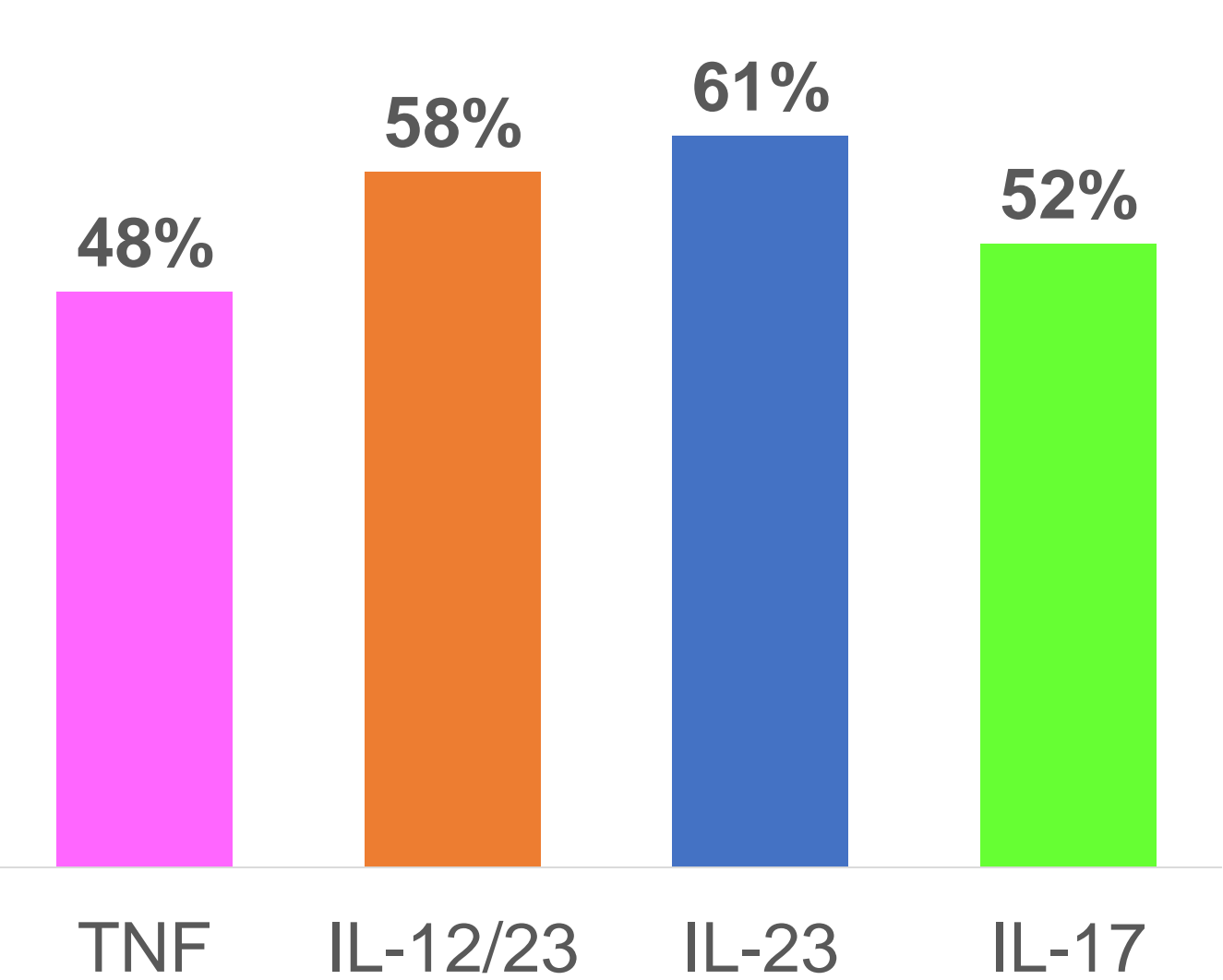
■ Psoriatic arthritis  
■ Psoriasis



### Kaplan-Meier persistence curves



### Persistence rate at 36 months



The **log-rank test** revealed no significant differences (p=0.1)

### Budgetary impact at 3 years

SNS-proposed scenario  
budgetary impact

€11.989.516,53

€6.123.964,47

Balearic budgetary  
impact

€18.113.481,00

## CONCLUSIONS

The study highlights that, with no statistically significant differences in persistence, the best therapeutic strategy is to prioritize the use of **TNF- $\alpha$  inhibitors** as proposed by the SNS.

## REFERENCES

de la Cueva Dobao P, Notario J, Ferrándiz C, López Estebaran JL, Alarcón I, Sulleiro S, Borrás J, Daudén E, Carrascosa JM, Sánchez Carazo JL, Monte Boquet E, Puig L. Expert consensus on the persistence of biological treatments in moderate-to-severe psoriasis. *J Eur Acad Dermatol Venerol*. 2019 Jul;33(7):1214-1223. doi: 10.1111/jdv.15600.

## CONTACT INFORMATION

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