



# COST PER RESPONDER TO USTEKINUMAB BASED ON THE FIRSTLINE ANTI-TNF $\alpha$ TREATMENT IN MODERATE-SEVERE PSORIASIS

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#### **OBJECTIVES**

With multiple biologic agents available for psoriasis treatment and a 20% of biologic therapy failure within 2 years, due to loss of efficacy or side effects; the research of the best treatment-order has become particulary relevant.

The aim of this study is to assess how the first-line antiTNFa (etanercept or adalimumab) therapy affects to ustekinumab cost per responder in patients with moderate-severe psoriasis.

#### **METHODS**

A single-centre, retorspective, observational, comparative study of 16 month (November2011-March2013) was carried out.

Patients were subjects that, after unsuccessful adalimumab or etanercept therapy were treated with ustekinumab.

The costs of ustekinumab and etanercept were determined from the recommended dosing schedule, extracted from public data and presented in 2016 euros. The primary endpoint compared the cost per responder in each group.

Effectiveness of the treatment was defined as the percentage of patients in each treatment group who achieved ≥ 75% improvement from baseline PASI-score (PASI75) at week 16; thus to calculate the cost per responder at week 16, the total cost of treatment in each group for 16 weeks was divided by the PASI75 response rates. Indirect costs were not included.

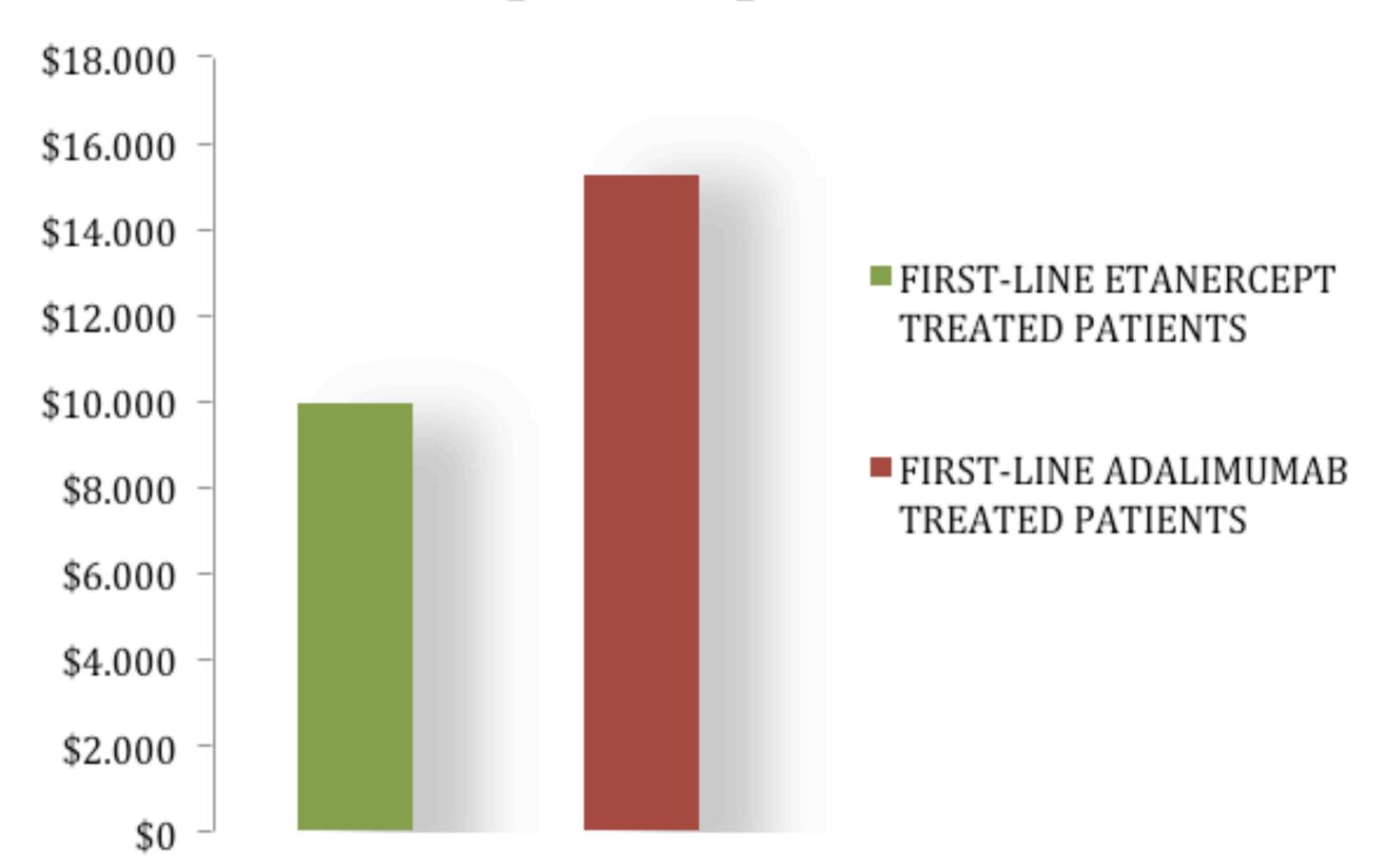
## RESULTS

33 patients were included in the study: 17 (51.5%) patients received as first line treatment etanercept and 16 (48.5%) received adalimumab.

The median age in etanercept group was 46.6, and 51.4 in adalimumab group (p=0,276). 41.1% and 50% of patients in etanercept and adalimumab groups were respectively men.

At week 16 of ustekinumab treatment, 76.5% (13/17) patients of etanercept first-line treatment achieved PASI 75 vs 50% (8/16) in the adalimumab first-line treated patients (p= 0,423). Thus, at week 16, cost per responder was 9,965€ for first-line etanercept treated patients and 15,247€ for adalimumab treated patients, an increase of 5,282€ per responder.

## Cost per responder at week 16



### CONCLUSIONS

Our results show that first line anti-TNF $\alpha$  (adalimumab and etanercept) treatment in moderate-severe psoriasis doesn't affect to ustekinumab effectivenes (p=0.43). So the most cost-effectiveness treatment sequence is etarnecept-ustekinumab. This kind of study, which analyses results in a real context setting may contribute to optimize health resources Future studies with a higher number of patients will assess the best cost-effectiveness sequence in biologic step treatment of moderate-severe psoriasis.