



EFFICIENCY OF BIOLOGIC AGENTS IN THE TREATMENT OF MODERATE TO SEVERE PSORIASIS

Lázaro P¹, Blasco AJ¹, Ferrándiz C², García A³, J Liso J⁴.

1. Técnicas Avanzadas de Investigación en Servicios de Salud, Madrid, Spain.
2. Hospital Germans Trias i Pujol, Barcelona, Spain.
3. Hospital de La Princesa, Madrid, Spain.
4. Complejo Hospitalario de Badajoz, Spain.

Objective: To estimate the cost/efficacy ratios of biologics authorized in Spain in 2009 (adalimumab, etanercept, infliximab and ustekinumab) in the management of moderate to severe psoriasis. **Methods:** A model for economic evaluation (decision tree) was built for the treatments with available scientific evidence. The payer perspective (National Health System) was used, only considering drug cost and assuming zero cost for placebo. In the case of weight-dependent dosing, the weight of the study participants was adjusted by age and sex to the standard Spanish population with correction for increased weight in individuals with psoriasis. The Psoriasis Area Severity Index (PASI) 75 criterion (improvement of 75% from baseline PASI) was used as indicator of efficacy. The incremental efficacy (calculated as the proportion of patients responding with PASI 75 criterion in the biologic group minus the proportion who respond in the placebo group) was assigned according to the results of clinical trials at the period of time defined in the primary efficacy outcome. When more than one trial was available per treatment, a meta-analysis was undertaken (DerSimonian-Laird method). Uncertainty was tested by deterministic sensitivity analysis, building scenarios with the confidence intervals at 95% for costs and efficacy. **Results:** The incremental efficacy in the baseline scenario ranged from 31.19 % (etanercept: 25 mg twice a week at 12 weeks of treatment) to 78.35% (infliximab: 5 mg/Kg at 24 weeks of treatment). The efficiency in terms of cost/efficacy, in the baseline scenario, ranged from € 8,013 (adalimumab at 16 weeks) and € 17,981 (ustekinumab: 90 mg at 12 weeks) per PASI 75 responder. In the sensitivity analysis, adalimumab remains as the most efficient biologic on the most and least favourable scenarios. **Conclusions:** Of the biologic agents authorized in Spain for treating moderate to severe psoriasis, the most efficient in terms of cost/efficacy is adalimumab.

Corresponding author: Pablo Lazaro y de Mercado (plazaro@taiss.com)

Técnicas Avanzadas de Investigación en Servicios de Salud (TAISS)
C/Cambrils 49, 28034 Madrid
SPAIN
Phone: 34-91-7310380
FAX: 34-91-7302893
www.taiss.com