Analyse the impact of introduction of biosimilar adalimumab (BA) (Hyrimoz®) in three different scenarios, in order to choose the most convenient.

Increasingly and widespread use of biological treatments is causing sustainability problems in health systems due to their high price. However, the emergence of biosimilars can lead to significant savings for health systems.

Background and importance

Aim and Objectives

An increasing costs in all scenarios is suspected due to a growing incidence

→ Costs would vary form
  • (scenario 1) 4 millions in three years
  • (scenario 2) 3.5 millions
  • (scenario 3) 2.7 millions
→ The choice of the different scenarios would mean savings of 11.5% to 31.8%, depending on the number of patients who are treated with BA.
→ Sensibility analyses showed that price of adalimumab is the most important value in final costs results.
→ Extreme conditions analysis showed a 20% variation from base-case with savings about 11.5% (scenario 2) and 30% (scenario 3).
→ The most convenient is scenario 3 (change patients already treated with RA and treat new patients with BA).

Conclusion and Relevance

Despite scenario 3 provides the widest savings (making possible to treat a large number of patients, authorities decided not to force change patients currently treated with RA, loosing savings about 20.33%)

Materials and Methods

Deterministic sensitivity analyses were conducted changing a +/-10% the three variables considered to have more impact in our model (price of adalimumab, incidence and prevalence).

Also an extreme analysis was performed in best and worst conditions.