

EFFICIENCY OF SECUKINUMAB VS ADALIMUMAB FOR TREATING HIDROADENITIS SUPPURATIVA IN SPAIN

Blanch C¹, Martorell A², Torres M¹, Molina A³, Jiménez A³, Gari C⁴,

¹ Novartis, Barcelona; ² Hospital de Manises, Valencia; ³ Hospital Universitario Virgen de las Nieves, Granada; ⁴ Outcomes10-PLG, Castelló de la Plana;

INTRODUCTION

Hidradenitis Suppurativa (HS) is an inflammatory skin disease with the potential to cause irreversible harm. It affects approximately 0.6% of the European population and, currently, adalimumab is the only biologic approved to treat HS. The low persistence of its efficacy generates the need for another therapeutic alternative. In April 2023, the EMA authorized secukinumab (IL-17A), which presents a new mechanism of action with evidence of clinical persistence based on the SUNSHINE and SUNRISE trials.

OBJECTIVE

To analyze the cost-effectiveness (CE) of secukinumab compared to adalimumab in Spain in terms of cost per responder (CPR) for the treatment of Hidradenitis Suppurativa.

METHODS

We developed a cost effectiveness decision tree model to compare secukinumab and adalimumab therapies over a 52-week treatment period (Figure 1). Each treatment sequence begins with either secukinumab or adalimumab as the first-line therapy. An alternative scenario was developed, which considers an acquisition cost discount of 30% for adalimumab, the average discount for biosimilars. A total of 100 patients with HS were considered for each treatment arm.

Efficacy

- Efficacy evaluated at weeks 16 and 52 for secukinumab arm, and at weeks 12 and 36 for adalimumab arm.
- Efficacy was based on published clinical trials: SUNSHINE and SUNRISE for secukinumab, PIONEER for adalimumab.
- Responders, defined as patients achieving a HSCR (Hidradenitis Suppurativa Clinical response) of 50% or more, stay in their current treatment arm. Non-responders undergo a switch in treatment (**Figure 1**):
 - In the secukinumab arm, non-responders switch to secukinumab boost at week 16. If they still do not respond after 16 weeks on secukinumab boost, they further switch to adalimumab at week 32. Non-responders at week 32 switch to secukinumab boost (q2w).
 - In the adalimumab arm, patients who show no clinical response at either week 16 or 36 switch to secukinumab.
- Model structure and parameters are validated by expert panel.

Costs

- Only treatment costs (€, 2023) were considered for the analysis.
- Prices for secukinumab were obtained from Spanish sources.
- Prices for adalimumab were calculated based on the average acquisition price and market share for adalimumab and biosimilars in Spain from 2020 to 2022.

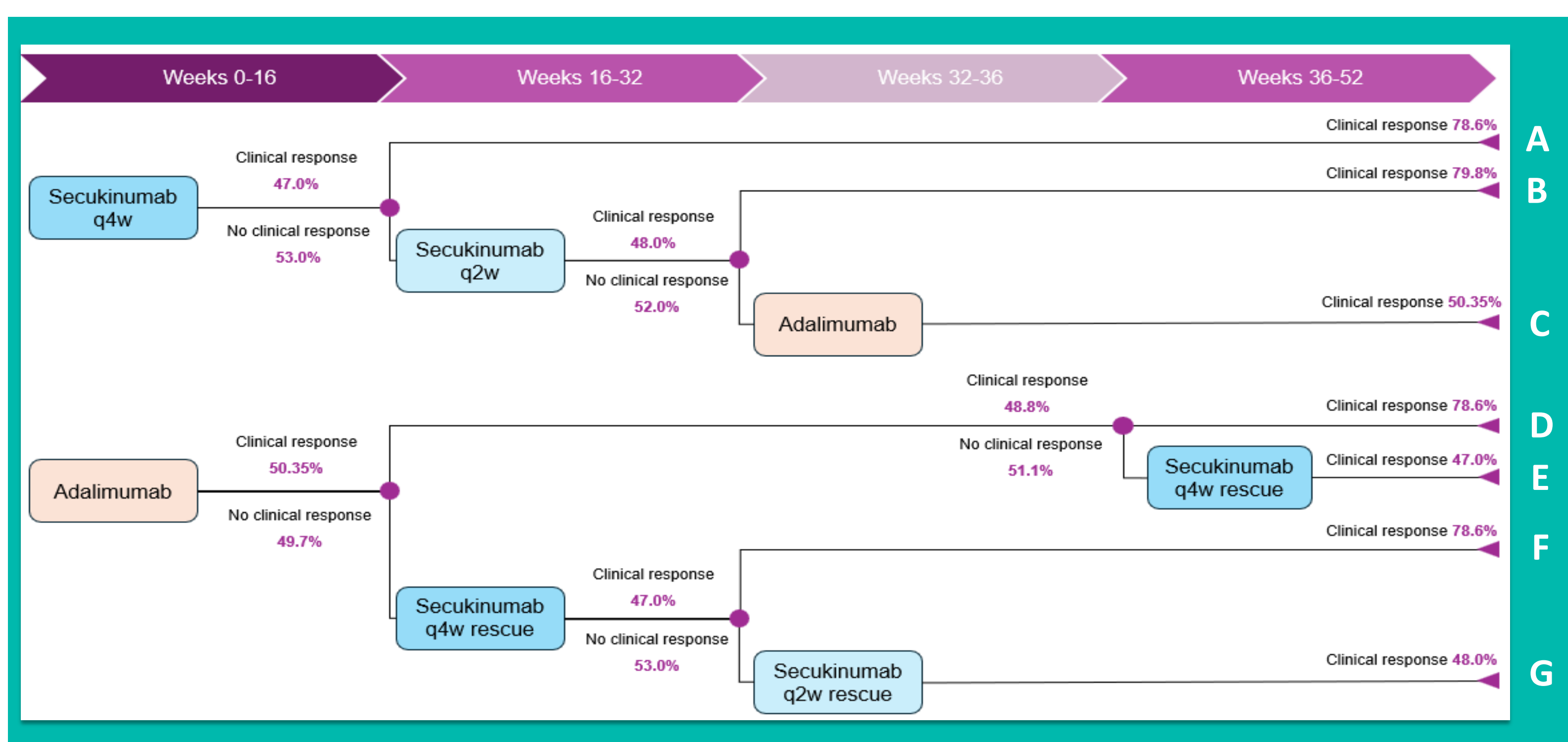


Figure 1. Decision tree model

q4w once a month; q2w twice a month.

The different treatment sequences were indicated with consecutive letters (A to G).

RESULTS

Base case scenario

After the 52-week treatment period, the total cost of secukinumab is 1.1% lower than adalimumab.

80,3% of responders who started with secukinumab did not change treatment, while only 30,6% of responders who started with adalimumab remained on the same treatment.

Primary failure costs –not reaching efficacy after induction phase- in secukinumab arm were €288,292, all due to secukinumab administration. In adalimumab arm, primary failure costs amounted to €411,484, with €218,510 attributed to adalimumab treatment and €192,975 to the carry-over of secukinumab induction.

Alternative scenario

Similar trends as in the base case were observed. Cost per responder for secukinumab treatment sequences was 19,777€, while for adalimumab it was €19,758. Overall, the cost per responder for the treatment sequences initiated with secukinumab showed that the costs were very similar, with a difference of €19 per responder in favour of adalimumab. But with less responding patients.

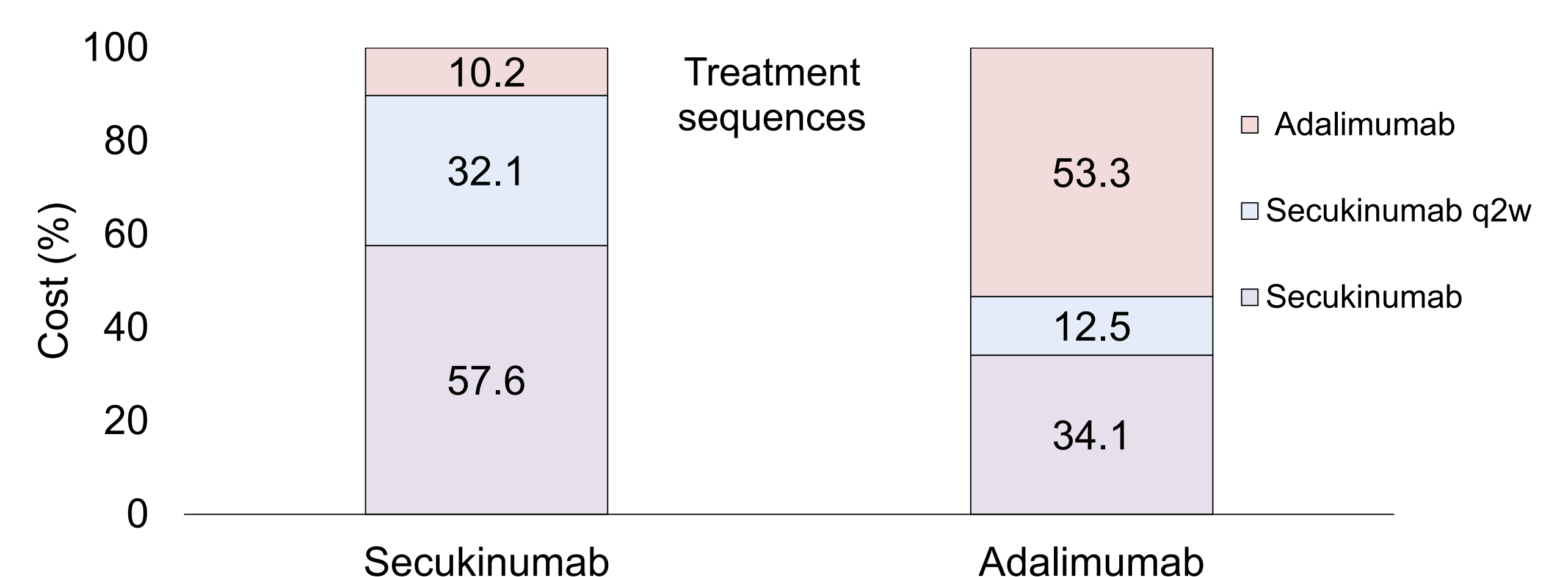


Figure 2. Total cost per drug according starting treatment. q2w: twice a month

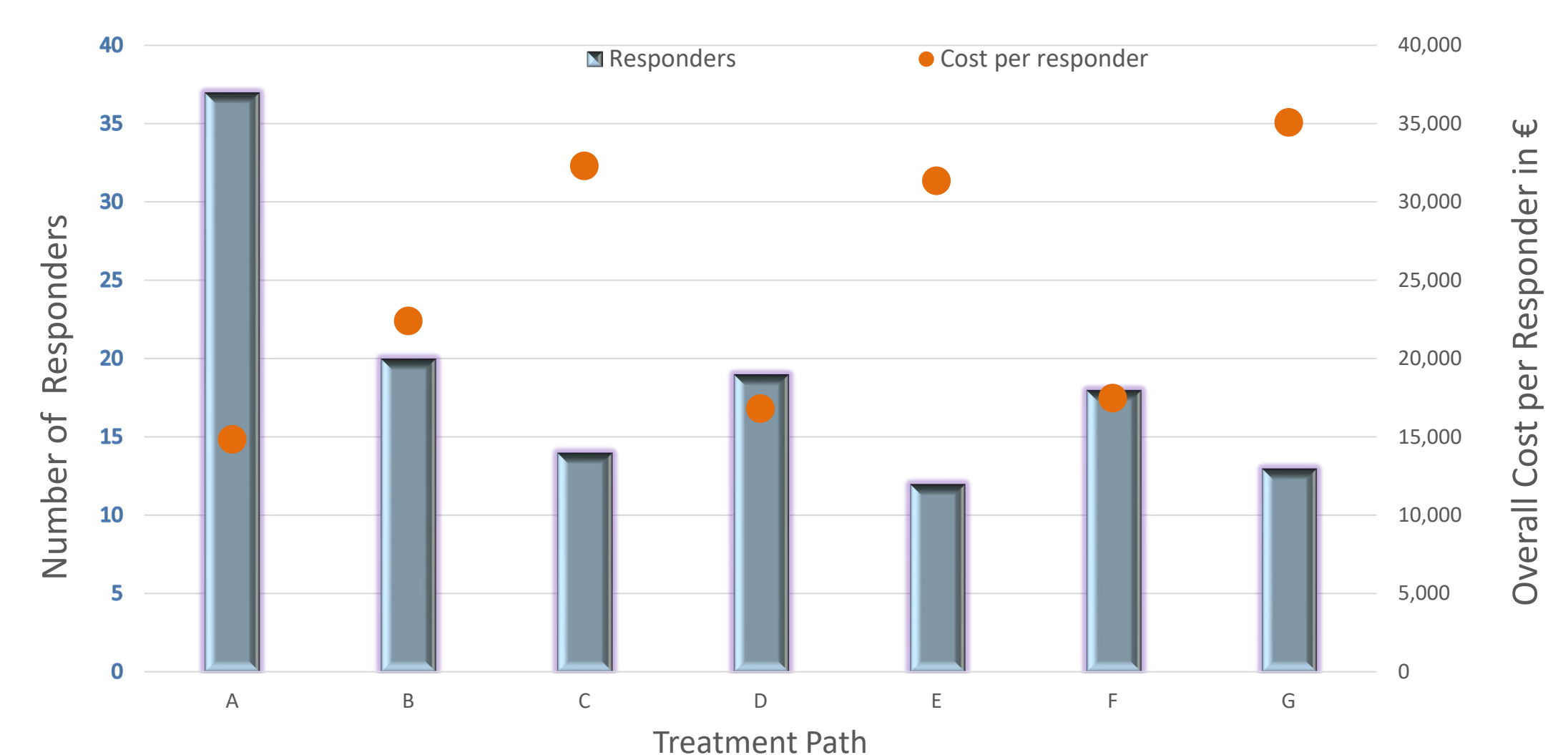


Figure 3. Number of responders and overall cost per responder according treatment paths (A-G)

CONCLUSIONS

Secukinumab is **more efficient** treatment for moderate-to-severe HS compared to adalimumab from the perspective of the Spanish NHS. It results in a higher number of responders and lower costs per responder. This efficiency is attributed to secukinumab **highest efficacy** and especially due to the **persistence of effect**, which aligns with findings from previous studies on other conditions like psoriasis and psoriatic arthritis.

Adalimumab posology –40mg weekly– has a big impact on adalimumab's overall cost that has to be considered, since is double compared to other indications. The consistency of **secukinumab posology** across different indications drives to a **well know economic impact** when using it for different diseases' management.

Despite some limitations, the study supports using secukinumab as a first-line treatment, as **there are no economic reasons to delay switching** from adalimumab when those patients do not reach HS control or symptoms relieve.

Additionally, **secukinumab** has demonstrated **improvement in patients QoL** which may **reduce both direct and indirect costs** associated with HS management.

REFERENCES

- 1) Kimball AB, et al. N Engl J Med. 2016;375(5):422-34; 2) Kimball AB, et al. Lancet. 2023;401(10378):747-61; 3) Ministerio de Sanidad. BIFIMED: Buscador de la Información sobre la situación de financiación de los medicamentos [Available from: <https://www.sanidad.gob.es/profesionales/medicamentos.do>; 4) Consejo General de Colegios Oficiales de Farmacéuticos. Bot Plus Web. Available from: [https:// botpl.usweb. porta lfarma. com/](https://botpl.usweb.porta.lfarma.com/)