Objective

Autoimmune diseases (ADs) are associated with a significant clinical and economic burden. Disease management is often challenging, requiring both delay of diseases progression and improvement of quality of life.

Infliximab is an effective choice for ADs management. Subcutaneous (SC) infliximab has the potential to significantly reduce ADs treatment costs, mainly due to avoided hospitalization costs compared to intravenous (IV) infliximab.

The aim of this study was to evaluate the Budget Impact (BI) of the introduction of SC infliximab in the formulary for ADs for the Greek healthcare system.

Methods

- A BI model was designed in Microsoft Excel and compared two scenarios: "world with" SC infliximab to "world without" SC infliximab.
- The analysis was performed over a 5-year time horizon and followed a third-party payer perspective.
- Model inputs included national epidemiological data, administration costs, and market share data. Selected dosing schemes were based on related Summary of Product Characteristics. Drug prices were obtained by the latest National Price Bulletin. Rebates and clawbacks were calculated and included in the analysis. Market share data were based on market research.
- The model included the assumption that dose titration will be required for patients treated with IV infliximab for Rheumatoid Arthritis and Crohn's disease.

Results

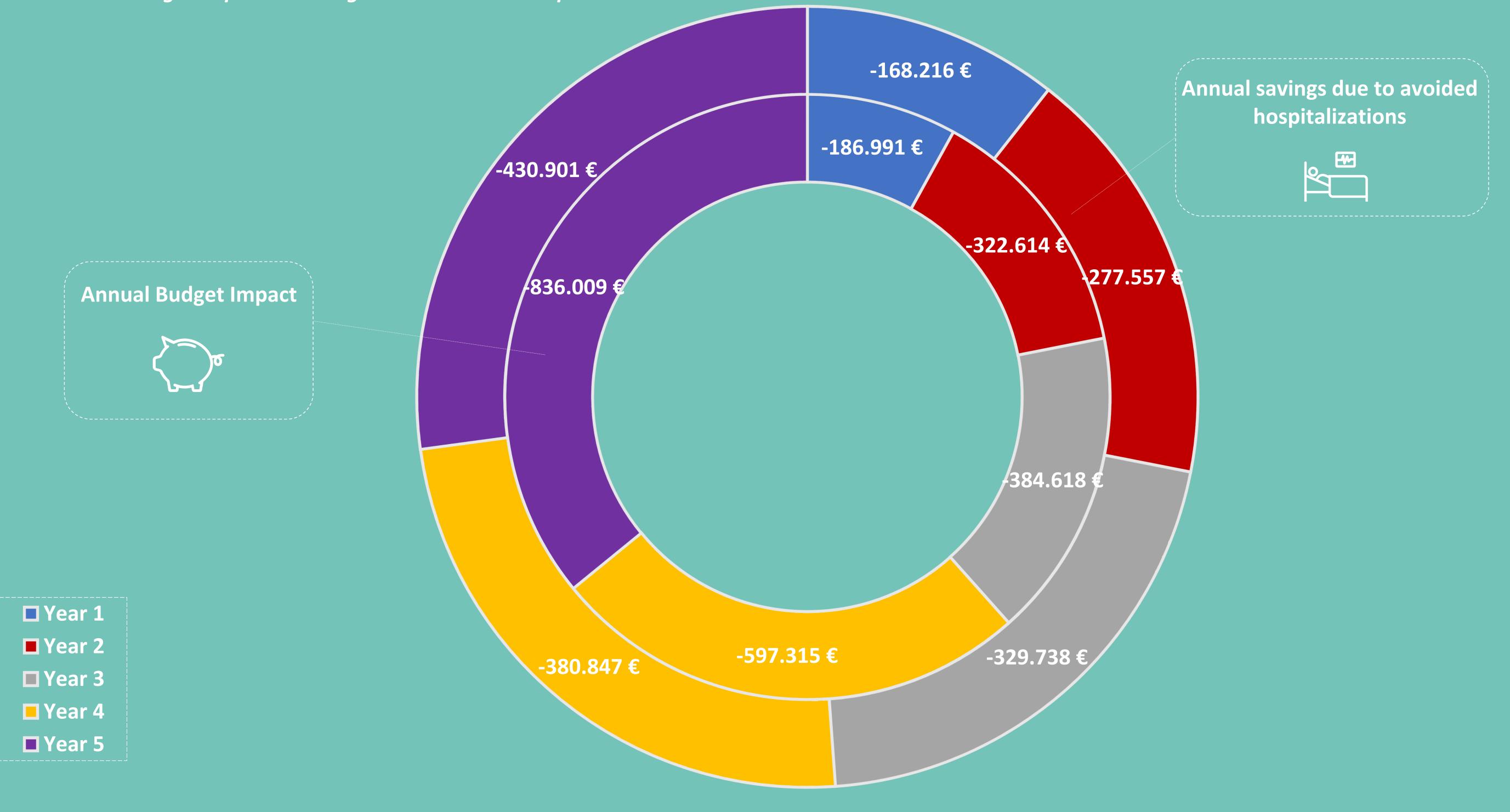
Cumulative 5-year budget impact from the introduction of SC infliximab in the positive list of reimbursed products could lead to substantial savings of up to 2,327,546 € for the Greek healthcare system (Table 1). The reduction of the total number of daily hospitalizations required for IV infliximab administration, resulted in a 1,587,259 € budget impact decrease, which was a major driver of the total savings (Figure 1).

Overall, the analysis showed that savings incurred by the introduction of SC infliximab could allow the treatment of approximately additional 308 patients with ADs in Greece.

Table 1. Budget Impact Results

	Year 1	Year 2	Year 3	Year 4	Year 5
World with SC infliximab	22.044.719 €	20.490.862 €	19.101.881 €	18.910.862 €	18.721.753 €
World w/o SC infliximab	21.833.778 €	20.128.731 €	18.670.316 €	18.259.323 €	17.824.394 €
Annual Budget Impact	-186.991 €	-322.614 €	-384.618 €	-597.315 €	-836.009 €
Cumulative Budget Impact	-186.991 €	-509.604 €	-894.222 €	-1.491.537 €	-2.327.546 €





Conclusion

Management with SC infliximab could decrease overall net budget impact for ADs in Greece, a result which is mainly driven by the reduction of total hospitalization costs, while improving patients' health-related quality of life by reducing hospital visits.

References

- Government Gazette 2768 B'/11.07.2018
- Remsima. European Medicines Agency (EPAR)
- Greek Ministry of Health. (2022, June 27). Official pricelist.

