



OPTIMISATION OF BIOLOGICAL THERAPIES AND ECONOMIC IMPACT ANALYSIS

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Background

The goal of optimisation is the individualization of treatments, guaranteeing the lowest effective dose and an adequate safety profile, minimizing cost associated. An optimisation strategy is to extend the interval dosing.

Purpose

The main objective was to evaluate the optimisation of biological therapies and their cost saving associated.

Material and methods

- ❖ A retrospective, observational and descriptive study of the optimisation of biological therapies used in autoimmune digestive, dermatologic and rheumatic diseases during one year (2016) has been done.
- ❖ The standard treatment regimen of these drugs are: *Etanercept 50 mg/weekly*, *Adalimumab 40 mg/fortnightly*, *Ustekimumab 45 mg/12 weeks*, *Infliximab 5 mg/Kg/8 weeks*, except in *Rheumatoid Arthritis*, *3 mg/kg/8 weeks*.
- ❖ The cost saving achieved was calculated by comparing the total cost of doses administered in a year to the total cost of doses which would have been administered if the drug was not optimised. Doses adjusted by weight for *Infliximab* were calculated for each patient.

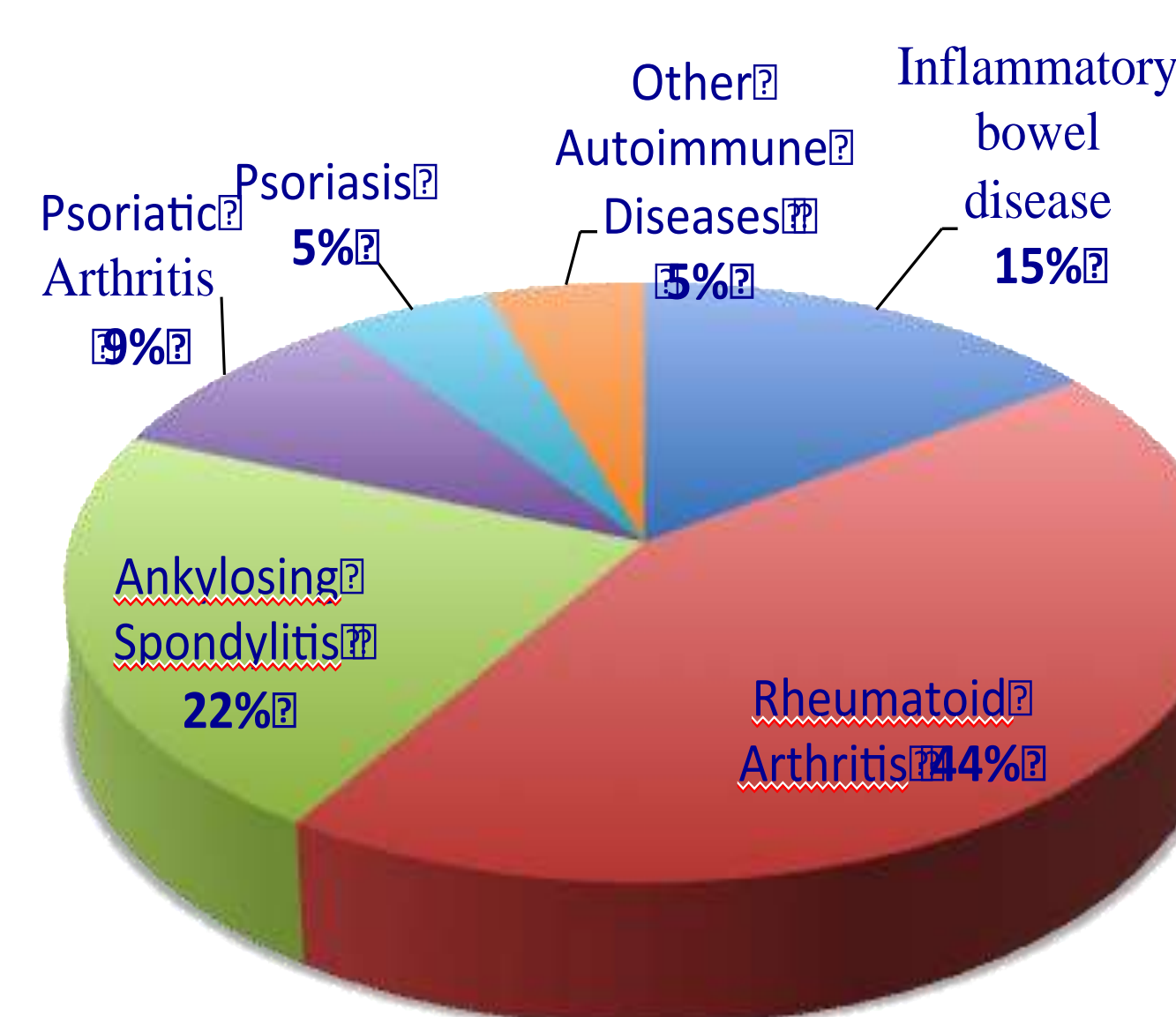
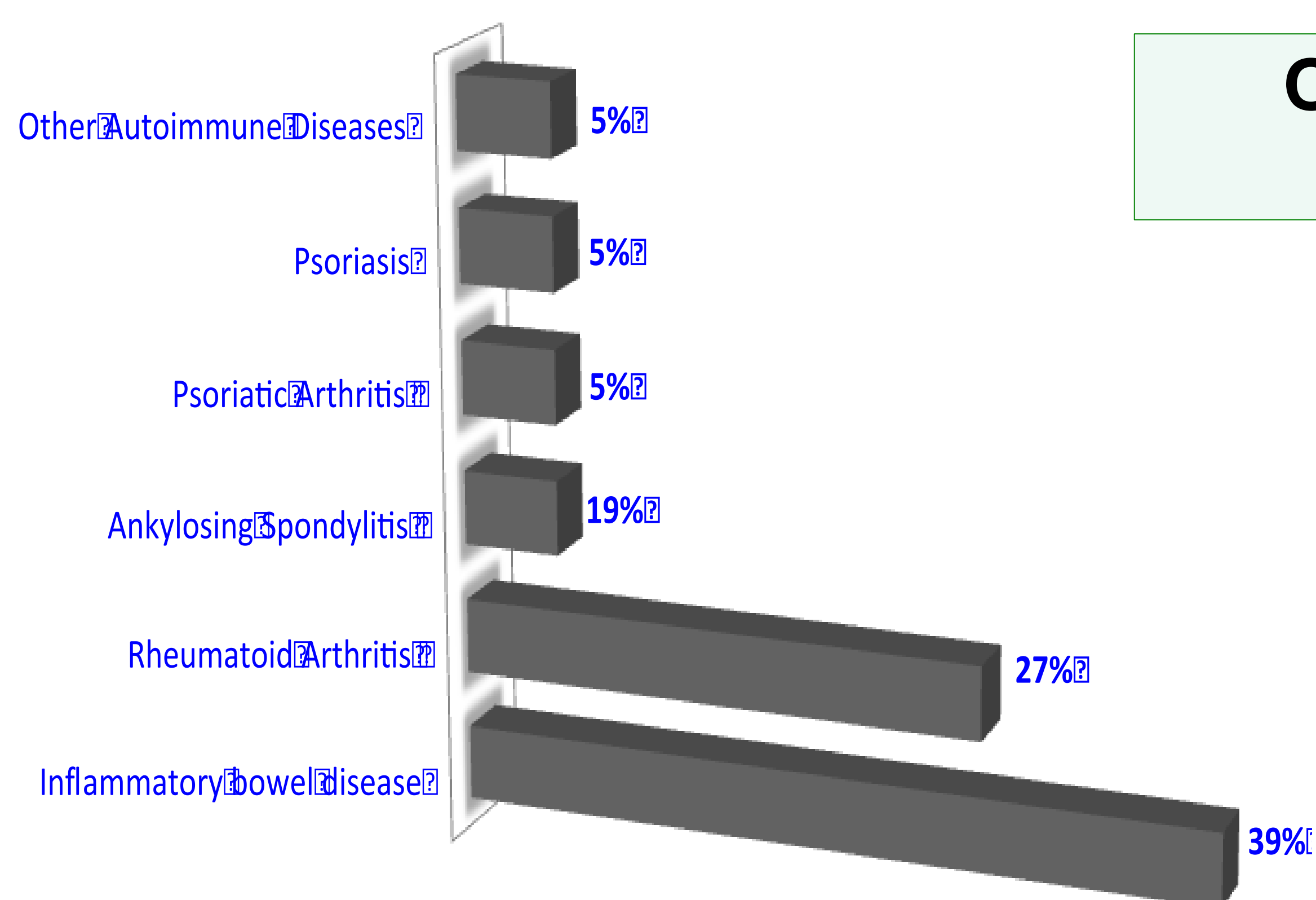
Results

- ✓ **276 patients** were analysed during the study period

Diagnosis

55 patients were optimised
(20%)

Optimisation according to diagnosis



Treatment optimization regimen used:

- **Etanercept (49%):** 50 mg/10 days (37%); 50 mg/fortnightly (29%); 50 mg/21 days (26%); 50 mg/monthly (4%); 50 mg/8 days (4%).
- **Adalimumab (35%):** 40 mg/21 days (58%); 40 mg/monthly (27%); 40 mg/18 days (5%); 40 mg/45 days (5%); 40 mg/56 days (5%).
- **Ustekimumab (5%):** 45 mg/16 weeks (67%); 45 mg/13 weeks (33%).
- **Infliximab (11%):** 5 mg/kg/10 weeks (50%); 5 mg/kg/11 weeks (33%); 5 mg/kg/12 weeks (17%).

A cost saving of 642,637 € was achieved in 2016



Conclusion

- ✓ A higher optimisation rate was found in rheumatoid arthritis.
- ✓ Etanercept was the most optimised drug.
- ✓ The most commonly used optimisation treatment regimen was Adalimumab 40 mg/21 days. During the study period, optimised patients had disease remission.
- ✓ This strategy shows many advantages from the point of view of safety, life quality of patients and the saving in healthcare costs.