

## COST MINIMISATION STUDY OF THE BIOLOGICAL TREATMENT OF INFLAMMATORY BOWEL DISEASE: USTEKINUMAB VERSUS VEDOLIZUMAB

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### BACKGROUND AND IMPORTANCE

Therapy for inflammatory bowel disease (IBD) has included ustekinumab and vedolizumab in cases where antitumour necrosis factor-alpha (TNFa) drugs or conventional therapy has failed. Currently, both drugs constitute a high economic impact at the hospital level.

### AIM AND OBJECTIVES

This was a cost minimisation analysis between vedolizumab and ustekinumab in IBD to determine the economic impact in a third level hospital

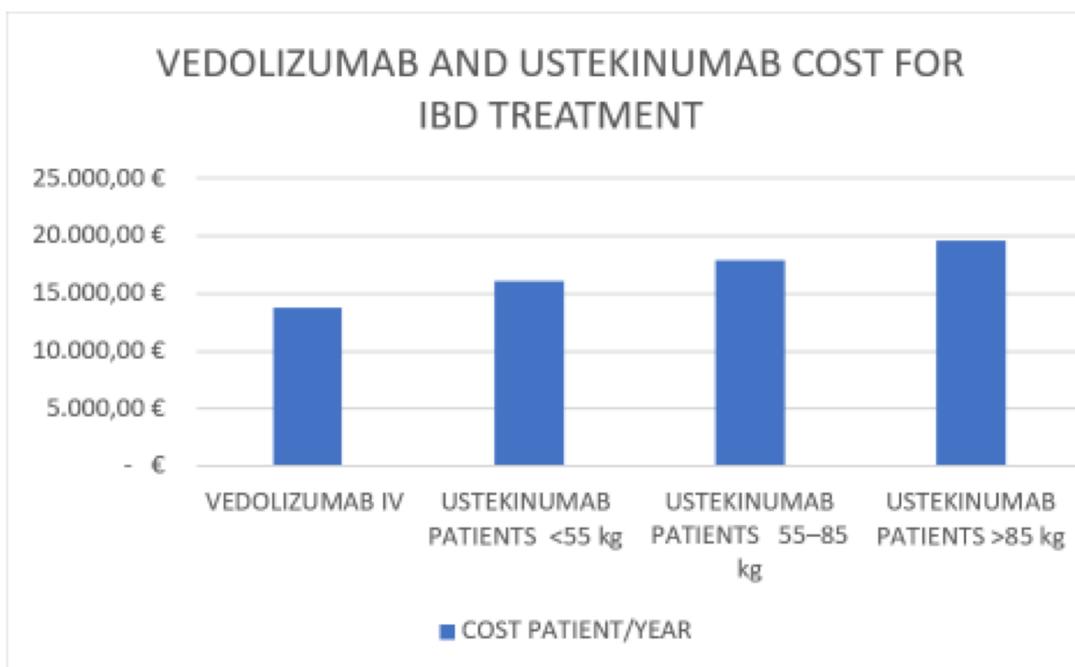
### MATERIAL AND METHODS

A 2 year, unicentre, retrospective study (January 2017–December 2019) was carried out in all IBD patients treated with vedolizumab and ustekinumab. The following variables were collected: patient weight, type of treatment and cost from the start of biological therapy.

The price of each drug was obtained from official data from the computer programme BOTPlus.

The cost of each treatment was estimated taking into account: the posological regimen described in the technical data sheet, costs derived from the day hospital and costs related to dispensing of the drug in the ambulatory pharmacy service of the centre. To carry out the study, both therapies were considered equivalent in terms of efficacy.

### RESULTS



63 patients were treated with ustekinumab or vedolizumab in our hospital during the study:

- 22 received ustekinumab: 36.4% (n=8) weighed <55 kg, 59.1% (n=13) between 55-85 kg and 9.1% (n=2) >85kg.
- 41 received vedolizumab (65,1%)

The total expenditure for ustekinumab on IBD during the study period was 388,911.39€.

The application of the pharmacoeconomic model described in the present work, in our population would have meant a saving of 76,814.24€.

### CONCLUSIONS

The results of this study show that vedolizumab is the most efficient alternative in all scenarios, with savings of up to 30% over the use of ustekinumab. Further cost effectiveness studies are necessary to corroborate the validity of these results.

