CROHN’S DISEASE: AN ECONOMIC ASSESSMENT OF BIOLOGICAL DRUGS IN ITALY

Americo Cicchetti1, Antonio Gasbarrini2, Matteo Ruggeri1
on behalf of WEF study group
1 Faculty of Economics, Catholic University of Sacred Heart, Rome, Italy
2 Faculty of Medicine, Catholic University of Sacred Heart, Rome, Italy

BACKGROUND
Crohn’s disease (CD) is a chronic, progressive and disabling inflammatory bowel disease (IBD) that can affect the entire gastrointestinal tract. The use of steroids and immunomodulators (such as azathioprine and methotrexate) has not decreased the need for surgery, nor has decreased hospitalization rates either. The introduction in 1998 of the so-called biological drugs, anti-tumor necrosis factor (TNF)-based, revolutionized both the treatment paradigms and the disease management, improving prognosis, but at the same time being characterized by higher costs and the need of hospitalizations for their administration. Literature well established biological drugs’ efficacy; only few economic evaluation compare it to placebo or published literature concerning the cost-effectiveness ratio of these drugs, some of which pointing up a wide uncertainty profile.

OBJECTIVES
The objective was to assess at a national level the economic impact of biological drugs in Crohn’s disease patients (CD) with severe or complicated disease, and to assess their cost-effectiveness versus the standard steroid-based therapy.

METHODS
A survey was jointly prepared by clinicians and pharmacoeconomists and administered in 9 centers in different Regions of Italy. The questionnaire was set up to detect QoL through a Visual Analogue Scale (VAS) and EQ-5D and to assess patients’ profile (age, gender, job) and clinical features (time-to-first diagnosis, current and at-diagnosis Montreal classification, current and at diagnosis treatments, past surgical procedures, hospitalizations). Collected data were then used in a statistical regression model and an economic assessment complete of probabilistic sensitivity analysis was performed comparing costs and utilities of the considered treatments.

RESULTS
At diagnosis, the 55% of patients were treated with steroids, while only the 3% with biological drugs (Figure 1).

A total of 348 questionnaires were collected, giving back a population with a mean age of 42, 52% male, 58% actively working, of the considered treatments.

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An Economic Assessment of Biological Drugs in Italy

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Concerning the QoL analysis, collected data showed that patients currently treated with biological drugs assign a higher score to their health state versus patients under other regimens (0.75 vs. 0.69, Figure 3).

Moreover, these results appear stronger in patients with comorbidities.

CONCLUSIONS
According to the Italian NHS perspective, considering annual drug costs and the disease cost (outpatients visits, hospitalizations, other treatments), results showed that the use of biological drugs significantly improves:

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