

Patient Preferences in Chronic Immune-Mediated Inflammatory Diseases Potentially Treated with Biological Drugs: Real-World Data Analysis.

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Background and Objectives

Immune-mediated inflammatory diseases (IMIDs) represent a high burden due to its chronicity, high prevalence, and associated comorbidities. Chronic patients' preferences must be considered on IMIDs treatment, and settings regarding the humanistic approach of the treatment are often underestimated. This study objective is to further understand these patient's preferences in a private setting.

Methodology

A D-efficient discrete choice experiment (DCE) was designed for eliciting the preferences of adult patients with IMIDs and potential adalimumab prescription. Participants (n: 87) were collected in private healthcare centres (rheumatology, dermatology, and gastroenterology practices) from February-May 2022. Patients chose between 14 choice pairs (Figure 1), characterized by 5 healthcare attributes: access to the specialist through primary care, being treated by a team or by specific physician, choosing the preferred physician, time until test was performed, and time until visit with physician; as well as monthly out-of-pocket drug price. The resulting data was analysed according to the random utility theory through a conditional logit model adjusted by patients' characteristics and the principal outcome was Odds Ratio (OR).

Results

87 patients answered the questionnaire (64% female; 57±13.49 years). Most patients had higher education (59%) and the most frequent pathologies were Rheumatoid Arthritis (31%), Psoriatic Arthritis (26%), and Ankylosing Spondylitis (18%). Patients answered logically, showing that the questionnaire was well understood, choosing mostly the options generally considered as better. The most relevant criteria were: choosing the physician of preference (OR: 2.25, or an increase of 125% of probabilities of choosing that scenario); reducing the time until visit with specialist, (OR 1.79, or a 79% increase), access without primary care, (OR 1.60, or a 60% increase), and an increase in monthly price from €100 to €300 (OR 0.55 or a reduction by 45%), and from €100 to €600 (OR 0.08, or a reduction by 92%) (Table 1). E.g: A given female participant, age 56, with compulsory education, income between €1,500 and €2,499 / month, active psoriatic arthritis and no experience with adalimumab would choose 80.4% of times an scenario where she can: i) choose doctor, ii) see the doctor in less than 2 months, iii) go directly to the doctor without attending primary care, and iv) pay €100. If the price increased to €300, the probability of choosing that option would decrease to 69.2%; if the price increased to €600, the options would decrease to only 26.5%.

Figure 1. Example of a pair of scenarios


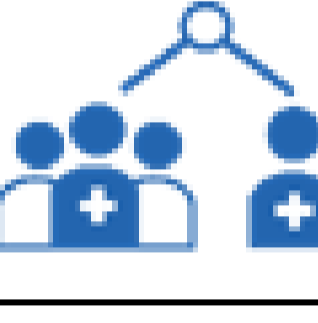


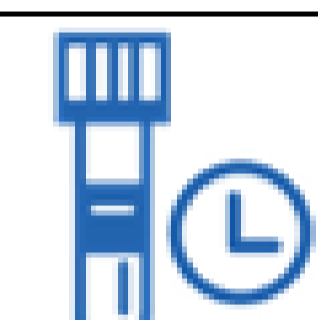

Criteria	Scenario 1	Scenario 2
	Direct acces to specialist	Through primary care
	Specific sepcialist	Team of specialists
	Less than two months	More than three months
	No possibility of election	Election by the patient
	Less than two months	More than three months
	€100 / month	€600 / month

Table 1. Conditional logit adjusted for characteristics, OR (SD)

VARIABLES	Model 1: Price as categorical variable	Model 2: Price as continuous variable
Price (Baseline €100)		0.9952*** (0.0004)
Increase from €100 to €300	0.5464*** (0.065)	
Increase from €100 to €600	0.0876*** (0.0215)	
Months until test (More than 3 / less than 2)	0.9846 (0.0793)	1.0686 (0.0918)
Doctor choice (No / Yes)	2.2531*** (0.2646)	2.1605*** (0.2503)
Months until visit with specialist (More than 3 / less than 2)	1.796*** (0.2035)	1.7373*** (0.1910)
Access through primary care (No / Yes)	1.5985*** (0.0577)	1.602*** (0.0582)
Being treated by (Team of professionals/ Specific professional)	0.9971 (0.0623)	1.0060 (0.0629)

***p<0.01, **p<0.05, *p<0.1

Model was adjusted by the following characteristics of patients: age, gender, education, income, time in treatment, and specific disease.

Conclusions

- Chronic IMIDs patients showed a preference towards a fastest, more personalized service
- An increase on quality could overweight an increase on price