PCR20

Preferences for Cancer Treatments: A Discrete-Choice Experiment with Adult Patients with Cancer in Europe

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Background

- Previous patient preference (PP) studies in oncology have generally assessed trade-offs over a wide range of treatment attributes with varying results such as the most importance being placed on improved survival compared with toxicity outcomes[1] or having further treatment options and life expectancy over adverse events[2]
- Preference studies with patients with cancer are relatively few
- The broader aim of this study was:
  - ✓To assess patient preferences and heterogeneity in preferences for attributes that are commonly considered in the regulatory and clinical assessment of the benefits and risks of cancer drugs in a selected population of patients with different cancers (breast, non-small cell lung cancer, multiple myeloma, stomach/colon, endometrial, chronic lymphocytic leukemia, melanoma, prostate) from three EU countries (Spain, Italy and Croatia) and
  - ✓To validate the results of previous PP studies

Main Objective

- To assess the preferences for time until disease progression, treatment administration, treatment location, and impact of side effects on quality of life (QoL)

Methods

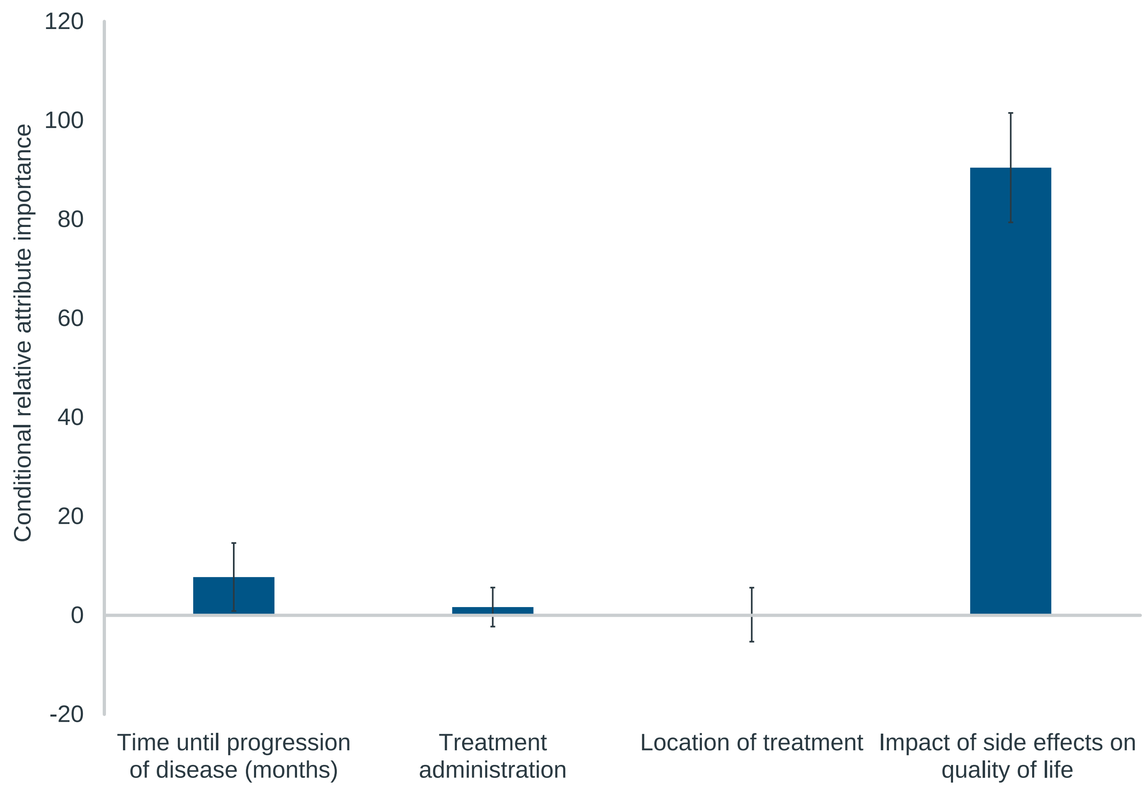
- Adult patient respondents were recruited by Global Perspectives from their different patient panels and patient associations
- An online discrete-choice experiment (DCE) survey was administered in Spain, Italy and Croatia
- Pairs of hypothetical cancer treatments had four attributes with varying levels: time until disease progression (3, 6, 9, and 12 months), treatment administration (oral pill/tablet or non-oral), treatment location (home or hospital/clinic), and impact of side effects on QoL (mild, moderate, or severe)
- Swait and Louviere test was subsequently used to assess whether country-specific data could be pooled together
- Unadjusted and covariate-adjusted random-parameters logit (RPL) models were fitted to the pooled country data to estimate treatment preferences and assess the conditional relative importance of each attribute
- A latent class analysis was additionally performed to explore subpopulation preferences

Results

- Spain (N=253), Italy (N=250), and Croatia (N=100) with mean age across countries of 54 years. About 54% had stage I cancer whose tumour had not grown deeply into nearby tissues. Approximately 42% were undergoing treatment (chemotherapy in the hospital or home or hormonal treatment)
- The impact of side effects on QoL was valued most, followed by time until disease progression, treatment administration, and treatment location, in that order (Figure 1). Both treatment administration and location of administration did not play a role when deciding which treatment to choose in the DCE questions (Figure 1).
- Preferences were similar across countries but varied by disease stage, education, and perceived comprehension of the DCE task
- Latent class analysis revealed 3 classes: the majority class 1 (56.3%) prioritized the impact of side effects on QoL and time until disease progression did not influence their preferences, class 2 (29.3%) placed more value on time until disease progression over the impact of side effects on QoL, and class 3 (14.5%) valued time until disease progression over the impact of side effects on QoL (Figure 2)

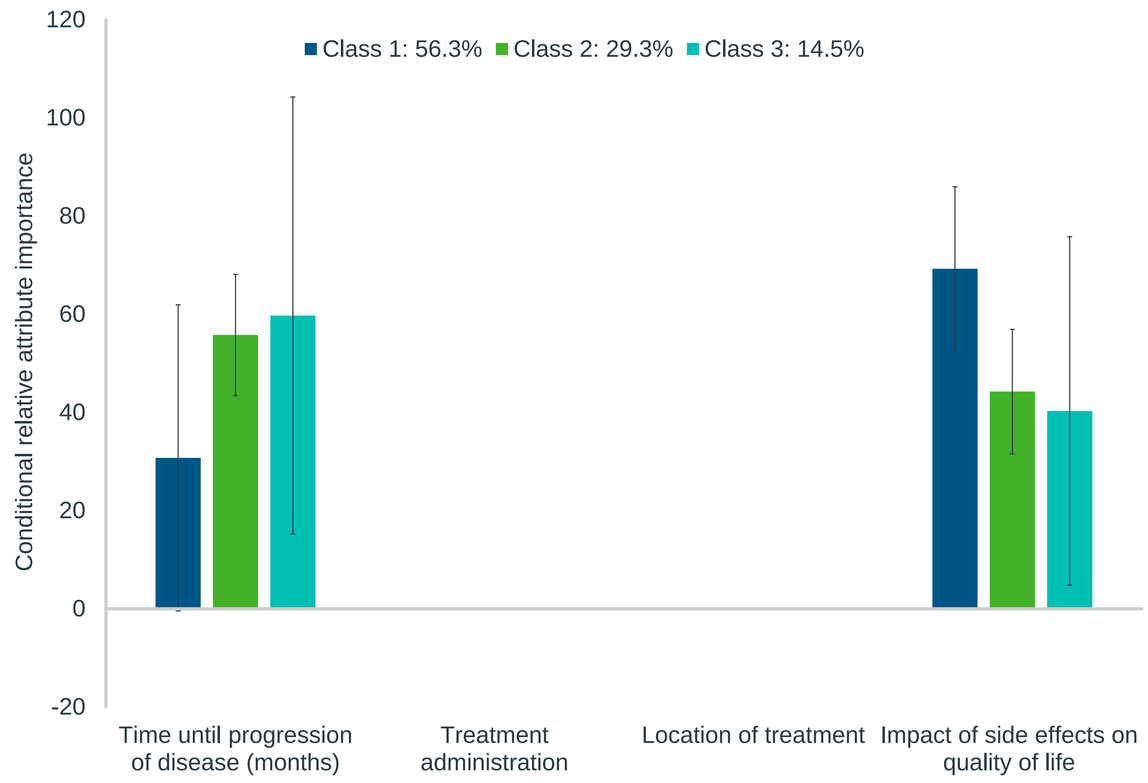
Results (contd.)

Figure 1: Conditional Relative Attribute Importance (N = 603)



Note: The conditional relative importance is the difference between the preference weights on the most influential attribute level and the least influential attribute level. These differences are summed across attributes and the sum is scaled to 100. The conditional importance of each attribute is a percentage of this total. The vertical bars surrounding each relative importance weight estimate denote the 95% CI around the point estimate (computed by the delta method).

Figure 2: Conditional Relative Attribute Importance--Latent Class Analysis (N = 603)



Note: The conditional relative importance is the difference between the preference weights on the most influential attribute level and the least influential attribute level. These differences are summed across attributes and the sum is scaled to 100. The conditional importance of each attribute is a percentage of this total. The vertical bars surrounding each relative importance weight estimate denote the 95% CI around the point estimate (computed by the delta method).

Conclusion

- In this study, patients prioritized impacts of side effects on their QoL over time until disease progression, treatment administration, and treatment location
- Treatment preferences among patients were not homogenous but varied across disease stage, level of education, perceived comprehension of the DCE task and subpopulations (classes)
- In our study, patients were more concerned about toxicity than efficacy compared with previous PP studies

The views presented are those of the authors and not those of the European Medicines Agency

References

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ISPOR EU 2023, Copenhagen, Denmark