Abstracts

Talking Posters
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QUALITY OF LIFE METHODOLOGY ISSUES

THE EUROPEAN REGULATORY ISSUES ON QUALITY OF LIFE ASSESSMENT (ERIQA) PROJECT
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BACKGROUND: The last 20 years have seen the development of hundreds of health-related quality of life (HRQL) instruments which are increasingly being used in multinational clinical trials. As a result, regulatory authorities are more and more faced with HRQL as a new outcome measure for the evaluation of new therapies. In 1997, Mapi Research Institute organised an exploratory meeting which brought together HRQL researchers and European regulatory representatives. The main objective was to highlight the regulatory authorities’ concerns about HRQL evaluation in clinical trials. Two conclusions were made: 1. There is a need to rationalise the field of HRQL research and to make HRQL a credible criterion for the evaluation of new therapies by health authorities; 2. This issue can only be resolved through a better collaborative effort between key players: health authorities, HRQL researchers and pharmaceutical companies. Following these conclusions, the ERIQA Project was launched.

OBJECTIVE: To provide European regulatory authorities with guidance on how to assess the quality of HRQL studies in clinical trials, and how to evaluate the validity of HRQL claims.

METHODS: The project is structured in 2 phases and 4 steps. Phase I will lead to the production of 3 types of documents, and presentations to regulatory authorities: 1. A review of existing guidelines, focusing on EMEA documents; 2. A reference document, i.e., a guidance for the regulatory authorities to assess the quality of HRQL evaluation and the validity of HRQL claims; 3. Pilot guidelines in specific indications: cancer and COPD asthma. Phase II will lead to consensus conferences with key players.

RESULTS: Preliminary results of Phase I will be presented. Collaboration with other similar US initiatives are also planned.

A REVIEW OF AVAILABLE HEALTH-RELATED QUALITY OF LIFE (HRQL) REFERENCE VALUES IN THE MEDICAL LITERATURE
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BACKGROUND: Within the last 20 years, a large number of HRQL instruments have been developed and are increasingly being used in multinational research and clinical practice. However, methodological issues relating to interpretation of HRQL results still need to be clarified and there is a need for improved interpretation of HRQL results. This could be achieved through the development of reference values. Reference values provide a means of comparing the results of an instrument’s administration across populations and across disease severities. The usefulness of reference values to interpret the burden of chronic disease has been illustrated in numerous studies.

OBJECTIVES: The purpose of this study was to review the available medical literature to assess the current availability of HRQL reference values.

METHODS: A thorough search of the Medline and Index Medicus database from 1966 to the present was conducted that included the following search terms: “normative data”, norms, “reference levels”, “reference values”, “quality of life”, and “health-related quality of life”.

RESULTS: A search of the Medline and Index Medicus databases yielded eight articles that referred to the development of reference values and 61 articles describing comparative studies where comparison were made of SF-36 scores to those of established reference values. These articles included the development and evaluation of reference values of the Medical Outcomes Study Short Form Health Survey SF-36 and the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire-C30.

CONCLUSIONS: Currently, few reference values exist, particularly, for disease specific questionnaires. Clearly, there is a critical need for the development of reference values for different diseases and populations according to clinical and socio-demographic criteria. These reference values may be used to make comparisons across populations and disease severities which will provide improved interpretation of the results of HRQL studies.
HRQL studies in clinical trials, and how to evaluate the validity of HRQL claims, for appropriate decision-making.

**METHOD:** A guidance document and a checklist have been designed following a literature search and using the experience of the ERIQA group’s members, i.e., HRQL researchers, pharmaceutical industry representatives, academic people, and reviewers for regulatory authorities.

**RESULTS:** The guidance document reviews the major issues of HRQL assessment in clinical trials, and especially practical considerations such as: selection of an HRQL questionnaire (i.e., minimal properties required, validation of translated versions); implementation of a HRQL assessment (i.e., training of study personnel, mode of administration, eligibility criteria, data collection, prevention of missing data, respondent burden, multicenter trial); statistical analysis (i.e., justification of the sample size, handling of missing data, handling of multiple statistical tests), and interpretation. For each issue, recommendations are made, even when there is no definite answer (e.g., interpretation of results). All the issues to be prespecified in the research protocol are mentioned. The checklist summarizes all the issues. It is intended to help both regulatory authority reviewers in performing their clinical trial reviews and sponsors and investigators in conducting a clinical trial with HRQL data and writing the study report.

**CONCLUSION:** The final objective is to reach a large European agreement upon this guidance document, to improve the quality of HRQL studies and to convince European regulatory authorities of the usefulness and scientific value of HRQL assessment.

**A EUROPEAN EQ-5D VALUE SET. MYTH OR REALITY?**

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**OBJECTIVES:** To harmonize VAS values resulting from 11 studies in 6 countries (England, Finland, Germany, The Netherlands, Spain and Sweden) using the EQ-5D valuation questionnaire, developed by the EuroQol Group. The aim is to make available a European EQ-5D value set and to gain insight into the influences resulting from the prevailing differences in methodology and sample characteristics.

**METHODS:** The database constructed for this research project contains data on more than 110,000 health states from 8,370 respondents. Appropriate transformation was applied to deal with ceiling and floor effects. Regression models and a single value decomposition were applied to explore the differences between the valuations in the 11 samples and the influences of background variables on the VAS values of a subset of 18 health states. Multilevel regression analysis on data of 49 health states was conducted to take into account characteristics at the individual respondent level while testing the impact of health state characteristics on the value set.

**RESULTS:** In general, the impact of the background variables such as age and experience of illness on the VAS valuations appeared to be modest. Differences in study methodology have a higher impact on the VAS values but differences in the health states themselves were found to be the major determinant of VAS values.

**CONCLUSIONS:** When corrected for the influence of the background variables, the VAS values from the 6 countries showed a remarkable agreement. Differences can be attributed to differences in survey methodology and sample characteristics rather than ‘cultural’ aspects. By using a simple instrument, i.e., the EQ-5D valuation questionnaire, it seems that an internationally consistent EQ-5D value set can be established.