INTRODUCTION:

Preference-based measures of health-related quality of life play a key role in the calculation of Quality-Adjusted Life Years (QALYs) for Health Technology Assessment (HTA). The Child Health Utility 9D (CHU9D) is a new preference-based instrument designed specifically for application in children and adolescents (aged 7 to 17 years). This study aimed to compare Chinese and Australian adolescent population preferences for CHU9D health states using profile case best worst scaling (BWS) methods.

METHODS:

Fifty CHU9D health states (blocked into five survey versions) were generated for valuation using a fractional factorial design. Study participants were recruited through an online panel company in Australia, and through primary and secondary schools in China. A latent class modelling framework was adopted for econometric analysis.

RESULTS:

A total of 1,982 respondents (51 percent female) in Australia and 902 respondents (43 percent female) in China provided useable survey responses. Latent class analysis indicated the existence of preference heterogeneity for both population groups. In the Australian sample, respondents in Class I placed the most importance on the mental health dimensions of the CHU9D (for example, Worried and Annoyed) and the least importance on daily activities (for example, Activities, Daily routine, Sleep), whilst respondents in Class II placed equal weights on all attributes. In the Chinese sample, respondents in Class I placed the most importance on the Activities dimension of the CHU9D and the least importance on the Annoyed dimension, whist Class II placed the most importance on the Schoolwork dimension and the least importance on Pain.

CONCLUSIONS:

This study has provided important cross-country insights into the use of profile case BWS methods to elicit health state preferences with young people for application in HTA in children and adolescents. The differential latent classes identified between Australia and China highlights the necessity to derive country-specific adolescent scoring algorithms for the CHU9D instrument for application in HTA.

OP58 Testing Of A Multiple Criteria Decision Analysis Value Framework With Decision Makers Across Europe

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INTRODUCTION:

We test in practice a Multiple Criteria Decision Analysis (MCDA) framework for the value assessment of a set of therapeutic options for the indication of hormone relapsed metastatic prostate cancer (mPC) through a series of simulation exercises with the participation of decision makers from different Health Technology Assessment (HTA)/insurance agencies across Europe, including TLV (Sweden), AETSA (Andalusia-Spain), INAMI-RIZIV (Belgium) and AOTMiT (Poland). The drugs evaluated were abiraterone, cabazitaxel and enzalutamide.

METHODS:

Using a multi-attribute value theory framework, past research outcomes and literature findings, an mPC-specific value tree was constructed incorporating relevant concerns as criteria. By adopting the MACBETH approach the different drugs were scored against the criteria through the development of value functions, relative weights were assigned to the criteria using a swing weighting technique, scores and weights were combined using an additive aggregation technique, and sensitivity analysis of results was conducted. All stages were informed through the participation of a small group of experts from each HTA/insurance agency

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at a series of decision conferences taking place in each country.

RESULTS:

Value parameters considered spanned the dimensions of therapeutic impact, safety profile, innovation level and socioeconomic impact. Overall weighted preference value scores were produced reflecting the performance of the treatments against the criteria while considering their relative importance. Order of treatments' rankings was identical across all agencies, with enzalutamide scoring highest and cabazitaxel lowest. Therapeutic impact criteria always produced the greatest relative weight. Hypothetical priority setting decisions were made based on "value-for-money" grounds through the use of "cost per unit of value" metrics by incorporating purchasing costs.

CONCLUSIONS:

The MCDA framework tested possesses a number of characteristics that could facilitate decision making, including the systematic and explicit incorporation of value trade-offs as part of model assessment and the transparency throughout all its stages. Therefore, it has the prospects to act as a practical evaluation tool for value assessment and communication during the HTA process.

OP60 Ramucirumab In Gastric Cancer Treatment: An Economic Evaluation

AUTHORS:

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INTRODUCTION:

Gastric cancer (GC) is one of the most common malignancy and the third leading cause of cancer mortality worldwide. Currently, platinum-based and fluoropyrimidine-based combinations represent the milestone of front-line drug regimens. Unfortunately, there are few treatment options after failure of first-line therapy. Ramucirumab, a human IgG1 monoclonal antibody to VEGFR-2, has been recently approved in the European Union (EU) for use as monotherapy or in combination with paclitaxel as second-line treatment in patients with advanced GC with progressed disease. We performed a cost-effectiveness analysis of the Ramucirumab plus paclitaxel doublet versus paclitaxel alone in patients with previously treated advanced GC, based on results of the RAINBOW trial (1).

METHODS:

A Markov model has been developed in order to estimate the Life Years Gained (LYGs) and the incremental cost-effectiveness ratio (ICER) for both treatments. The model adopted the Italian healthcare system perspective and the time horizon is that of the lifetime of a patient with an advanced GC. The model considered three distinct health states: stable, progression or death. Transition probabilities were extracted from the Kaplan-Meier curves provided in the trial and cubic/spline function was used to approximate the extrapolation of survival curves for each treatment cycle. An internal model validation was performed to validate the Overall Survival (OS) curves generated by our model simulation. We based our economic analysis on clinical data and resource consumption (drugs, drug administration, supportive care medications, disease monitoring and graded 3 or 4 adverse events) on the Italian setting (2,3). All costs were expressed in euros. Sensitivity analysis also have been performed.

RESULTS:

This cost-effectiveness study demonstrated that, in 2nd-line therapy, the combination of ramucirumab with paclitaxel provides an incremental benefit (+1.54) at high incremental cost (EUR41,616) per LYGs.

CONCLUSIONS:

At a threshold of EUR5,000 for LYGs, based on Italian perspective, ramucirumab plus paclitaxel had less probability of being cost-effective. To our knowledge, our study is the first modeling study from an Italian

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