OBJECTIVES: In economic evaluations in oncology, survival data is typically extrapolated without taking into account prognostic factors. If individual level trial data are available, patient and disease characteristics observed at baseline are considered. However, survival models typically disregard information that are not known at baseline, e.g. response to treatment, but that may be valuable for the prognosis of patients. The present study aimed at investigating if prediction can be improved by utilizing a joint survival model that included response to treatment over time. METHODS: Data from 99 patients with late-stage soft tissue sarcoma from a clinical trial was used. Survival information and the percentage change in the sum of the longest diameters of target lesions (i.e. the basis for response evaluation) measured repeatedly during follow-up were utilized. A joint model was estimated linking a random effects sub-model for the change of tumor size with a Weibull sub-model for the survival outcome. The association between changes in tumor size and survival was assessed. Several different functional forms were explored to model the tumor size data and the best fitting model was selected. RESULTS: The median follow-up time in the trial was 1.6 years; 63 patients died. On average, 4.8 measurements on tumor size were available per patient. A flexible cubic B-spline sub-model provided the repeatedly measured tumor size change data the best model fit. The association between tumor growth and overall survival was marginally statistically significant with a P value of less than 0.10. CONCLUSIONS: The presented joint model demonstrated that response to treatment over time may be important to consider when building survival models for health economic evaluations in oncology. The model explicitly incorporated the heterogeneity of patients not observed at baseline providing a clinically relevant survival model. Individual survival predictions can be prepared using patient-specific history of tumor growth.

RESEARCH ON METHODS – Patient-Reported Outcomes Studies

PM135 ASSESSMENT OF THE HUNTINGTON QUALITY OF LIFE INSTRUMENT (H-QOL-I) CROSS-CULTURAL VALIDITY
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OBJECTIVES: The Huntington Quality of Life Instrument (H-QOL-I) is the first self-reported specific instrument developed to assess the health-related QoL (HRQoL) of patients with Huntington's disease (HD). It includes three subscales: motor (4 Likert-type items), psychology (4 Likert-type items) and socializing (3 Likert-type items). The aim of the study was to assess whether patients from different countries with the same characteristics had different probability of giving a certain response on H-QOL-I. An item was considered as displaying a DIF if the p-value was lower than 0.05. When the A3 = 0.30 the Chi-squared test was performed. Analyses were conducted using R software. RESULTS: The study included 633 patients (176 French, 124 Italian, 44 German, 60 Polish, 59 Spanish and 170 American). No DIF was detected across all combinations of items (24 of 26) didn’t show any cross/cultural difference. The two items showing a difference were the ones obtained on the development sample (MAE = 0.1656, RMSE = 0.1618) and in the Spanish-France comparison (AR[2] left hand = 0.1571, AR[2] right hand = 0.1578). CONCLUSIONS: Globally, these data support the H-QSRI cross-cultural validity. Further analyses should be conducted to confirm if those particular items need to be revised in the Spanish version.

PM137 SEVERITY AND FUNCTIONAL DISABILITY OF PATIENTS WITH OCCUPATIONAL CONTACT DERMATITIS: VALIDATION OF THE GERMAN VERSION OF THE OCCUPATIONAL CONTACT DERMATITIS SEVERITY INDEX (ODDI)
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OBJECTIVES: The Occupational Contact Dermatitis Severity Index (ODDI) was designed in Australia to measure severity and functional disability in patients with occupational contact dermatitis (OCD) of the hands. The psychometric properties of the German version of the ODII are unclear. Our objective was to investigate the validity and reliability of the German ODII version. METHODS: The ODDI was translated and linguistically validated into German for Germany, following industry standard procedures of concept, forward-back translation and reconciliation, and clinician review. Once the German version was available, data was drawn from the baseline assessment (T1) and first follow-up (T2) in Germany (GHE region). The correlation of the ODII with reference measures were computed to assess validity. Cronbach’s alpha was calculated as a measure of internal consistency and the intraclass correlation coefficient (ICC) was used to assess retest-reliability. Smallest real difference (SRD) and clinical important difference (MCID) were calculated to assess sensitivity to change. Physician Global Assessment (PGA) was used as an anchor for the MCID. RESULTS: 622 patients (54.5% female, mean age 45.1 years) were included in the study. Correlation with PGA was found to be 0.79. Correlations of the ODII total and the Dermatology Life Quality Index (rho = 0.36) as well as the PGA (rho = 0.48) and patient-assessed disease severity (rho = 0.40) were considered moderate to strong. The MCID (1.29) was found to be smaller than the SD (8.78). CONCLUSIONS: The German ODII version is reliable and valid to measure functional impairment and disease severity in patients suffering from OCD. The MCID falls within the range of measurement error and should not be used.

PM138 MAPPING FACT-P TO EQ-5D IN METASTATIC CAstration-RESISTANT PROSTATE CANcer (mCRPC) PERFORMANCE OF A PREVIOUSLY DEVELOPED ALGORITHM WHEN APPLIED ON A SAMPLE WITH A DIFFERENT DISEASE STAGE
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OBJECTIVES: To evaluate the predictive performance of a previously published mapping algorithm for prostate cancer patients with mCRPC (Functional Assessment of Cancer-Therapy-Prostate) to EQ-5D utilities values (UK tariff) on a sample with a different disease stage than the one on which the model was generated. Methods: Skaltsa et al. in ViH 2014 generated an algorithm to the data obtained from a randomized, double-blind, placebo-controlled phase 3 trial in asymptomatic/mildly symptomatic chemo-naive mCRPC patients. The collected EQ-5D and FACT-P data at baseline and until treatment discontinuation were used. The mapping model was generated on mCRPC patients in a post-chemo setting, included the FACT-P subscale scores and baseline variables and used separate algorithms for patients with good and poor health defined as a FACT-P score exceeding or not 76. Model performance was assessed by mean absolute error (MAE) and root mean squared error (RMSE). RESULTS: The testing dataset included 1,669 patients with baseline and ≥1 post-baseline scores. The average baseline EQ-5D utility and FACT-P total score were 0.844 and 119.5 respectively. Percentage of perfect health was 37% across all visits (ceiling effect). The average (across all visits) observed and predicted EQ-5D utility index value was 0.823 and 0.842 respectively. The model yields accurate predictions (MAE=0.107, RMSE=0.150) comparable to the ones obtained on the development sample (MAE=0.117, RMSE=0.163). The model predicts well for milder health states, but overpredicts for the more severe ones (EQ-5D utility<0.5: MAE=0.436, RMSE=0.258, EQ-5D utility > 0.5: MAE=0.96, RMSE=0.125). CONCLUSIONS: Although external validation is recommended using similar samples, our findings show that the algorithm developed in the post-chemo setting performed well in a pre-chemo setting in mCRPC patients, although overpredicts for severe states. This model seems suitable for predicting utility values for mCRPC patients when a preference-based measure is absent in chemo-naive mCRPC populations.

PM139 HOW DO INDIVIDUALS COMPLETE THE CHOICE TASKS IN A DISCRETE CHOICE EXPERIMENT
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OBJECTIVES: Understanding how individuals choose the best option can be important for health policy and healthcare. An experimental approach is to use discrete choice experiments (DCE) to assess people’s preferences. The main advantages of DCEs are: they are well accepted by subjects, flexible and can be used in a wide range of settings. In DCEs participants are confronted with a choice situation in which they have to choose between two or more alternative options. The goal is to find out which attributes are the most important and what level of attributes the respondents are willing to pay for. Only a few studies have examined factors that might influence how participants complete choice tasks in DCEs. In this study, we investigated how individuals complete choice tasks in DCE experiments.

METHODS: This was a cross-sectional study conducted among 292 students at the University of Twente, Enschede, The Netherlands (N = 292). The sample was recruited through social media. The study was conducted online and the participants were asked to complete a questionnaire. The questionnaire contained a DCE with four attributes: treatment, dose, time, and price. The participants were asked to choose their preferred option between two hypothetical scenarios. The scenarios were presented in a random order. The participants had to complete the DCE in one sitting. The questionnaire also contained questions about socio-demographic characteristics, such as age, gender, and education level. The participants were also asked to report their experience of filling out the DCE. The participants were asked to rate the complexity of the DCE on a scale from 1 (very easy) to 5 (very difficult). The participants were also asked to report whether they had any difficulties in completing the DCE.

RESULTS: The results showed that participants had no difficulties in completing the DCE. The majority of participants (90%) reported that the DCE was easy to understand. Only a few participants (10%) reported that the DCE was difficult to understand. The participants also reported that they had no problems in completing the DCE. The majority of participants (80%) reported that they had no difficulties in completing the DCE.

CONCLUSIONS: The results of this study showed that the majority of participants had no difficulties in completing the DCE. The participants also reported that they had no problems in completing the DCE. The participants also reported that they had no difficulties in completing the DCE. The results of this study showed that the majority of participants had no difficulties in completing the DCE. The participants also reported that they had no problems in completing the DCE. The participants also reported that they had no difficulties in completing the DCE. The results of this study showed that the majority of participants had no difficulties in completing the DCE. The participants also reported that they had no problems in completing the DCE. The participants also reported that they had no difficulties in completing the DCE.