addition, the Dutch National Health Care Institute commented on usefulness for decision makers. Readers interested in developing a unique approach could comment during a workshop at ISPOR Montreal 2014. RESULTS: 35 Validation techniques were identified and grouped into four categories: conceptual model validation, computerized model validation, data validation and operational validation. Around 30 HE experts commented on each item of the draft tool. The Dutch health care advisory institute suggested to add one more item. Participants from the ISPOR workshop delivered 19 filled-in questionnaires. A fourth of a model. It will be useful as part of reimbursement dossiers, by providing systematic and transparent insight into the validation efforts performed and their results.

PMR80

MODELLING SURVIVAL IN THE PRESENCE OF DIFFERENT MECHANISMS OF ACTION: IPILimumAB AND VemurafenBiN IN ADVANCED MELANOMA

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OBJECTIVES: Traditional indirect treatment comparison methods compare the underlying survival profiles of treatments are similar (i.e. proportional hazards). This assumption is unlikely to hold for the comparison of ipilimumab and vemurafenib. Whereas vemurafenib exhibits improved short-term survival compared with ipilimumab, pooled study data for ipilimumab consistently show that patients achieve durable long-term survival. We present a method to compare across trials with differing survival profiles accounting for follow-on treatments and different baseline characteristics. METHODS: Comparative survival estimates for ipilimumab and vemurafenib were produced using patient-level data from trial CA184-024 for ipilimumab and survival curve data from trial BRIM-3 (alongside survival curve data for vemurafenib. The BRIM-3 vemurafenib overall survival curve was adjusted to account for (a) the effect of second-line ipilimumab (via a funnel-state methodology) and (b) differences in patient baseline characteristics between trial CA184-024, bi by means of a model (Korn model, constructed to predict the outcomes for dacarbazine-treated patients. The resulting survival estimates were compared with naive unadjusted survival curve fits, and estimates produced using a hazard ratio of 1 (i.e. (in a forest plot) to the ipilimumab data. RESULTS: Estimated survival for ipilimumab was 3.3 years (mean). Predicted survival for vemurafenib, using a naive comparison, was 3.0 years (mean). Adjusting for second-line ipilimumab and different baseline characteristics resulted in an estimate of 2.8 years for vemurafenib. When a hazard ratio was applied to the ipilimumab data, which underlies the here strong assumption that the vemurafenib overall survival profile is similar to that of ipilimumab, predicted survival for vemurafenib increased to 4.2 years (mean). CONCLUSIONS: When applying the methodology, the mean predicted survival for vemurafenib varied from 2.8 to 4.2 years. Alternative methods that incorporate the long-term survival profile of ipilimumab (naive comparison or more sophisticated ad hoc methodology) demonstrate a higher number of life years with ipilimumab versus vemurafenib.

PMR81

HEALTH ECONOMIC MODELS IN ALZHEIMER’S DISEASE: A CRITICAL ASSESSMENT

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OBJECTIVES: Alzheimer’s Disease destroys brain cells, causing problems with memory, thinking, and behavior severe enough to affect work, family and social relationships. However, the most basic activities of daily living. The methods and/or rationale given for the approach used to model the relationship between OS and PFS/TPP within the independent Assessment Report, and other reports/analyses in relation to the appraisal process. RESULTS: In those instances where OS data were immature or not available, PFS/TPP was typically assumed to be a valid surrogate of OS. Justification for the assumption was incompletely reported. In some cases where models a quantification of the assumed relationship was informed by published evidence and/or expert judgement. In some cases attempts were made to explore the potential impact of this relationship in sensitivity analysis. CONCLUSIONS: The methods and/ or rationale given for the approach used to model the relationship between OS and PFS/TPP in health economic models has been inconsistently reported and justified. Whilst some health economic models attempted to quantify this relationship, further transparency is required. A consensus needs to emerge on the most appropriate approaches to be used within health economic models to quantify this relationship, specifically when OS data are not available or immature and to identify the circumstances when particular approaches may be most relevant.

PMR83

COMPARISON OF METHODS TO ESTIMATE HEALTH STATE UTILITIES IN METASTATIC BREAST CANCER

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OBJECTIVES: Patient-level utility values for different stages of MBC and toxicities commonly associated with chemotherapy regimens are useful for health economic assessments. Three methods to estimate utilities exist when direct utility data are not available: utility ‘mapping’ using expert opinion, an existing condition-specific scale and vignette studies that describe the health states; or derivation of preference-based measures from an existing condition-specific scale. This study compares utility estimates in MBC utilizing the above methods. METHODS: Based on data from a phase 1 clinical trial in MBC (N=1102) utility mapping was conducted using a published regression algorithm to convert the EORTC QLQ-C30 questionnaire to the EQ-5D utility. Mean utility values were estimated for relevant health states: stable disease (SD), tumor response (TR), progressive disease (PD) and death (DE). Results were compared to previously published values obtained for a vignette study conducted in one hundred members of the general public. RESULTS: Observed MBC utilities were similar in mapping vs. vignette studies for SD: 0.607 vs. 0.715, and TR: 0.782 vs. 0.790. General public respondents in the vignette study assigned much lower utility to symptomatic DP (0.443) vs. imaging-based DP in mapping study (0.679), and disutility for toxicities: vomiting: 0.109 vs 0.050, fatigue: 0.115 vs 0.029, febrile neutropenia 0.159 vs 0.022 (vignette vs. mapping). Differences in toxicities and health state utilities were not associated with disutility in the mapping study (potentially due to small sample size) while disutility of 0.116, 0.151, and 0.114 were reported by the vignette study. CONCLUSIONS: Utilization of different methods to estimate utilities in MBC may lead to a wide range of estimated values with potentially significant implications for health economic evaluation. Caution must be exercised when comparing utility values derived using different methods. It is preferable to collect and use data from patients directly and use vignettes as a last resort.

PMR84

COST-EFFECTIVENESS MODELS FOR CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD): CROSS-MODEL COMPARISON OF HYPOTHETICAL TREATMENT SCENARIOS

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OBJECTIVES: To compare different COPD cost-effectiveness models with respect to structure and input parameters and to cross validate the models by running the same hypothetical treatment scenarios. METHODS: COPD modeling groups simulated four hypothetical interventions with their model and compared the results with a reference scenario of no intervention. The four interventions modeled assumed: 1) 20% reduction in decline in lung function, 2) 25% reduction in exacerbation frequency, 3) $25,000 discount rate and 3) 10% discount rate. Results were compared using the same hypothetical treatment scenarios. RESULTS: Seventeen out of nine contacted COPD modeling groups agreed to participate. Differences in 5-year QALY gains ranged from 0.0020 to 0.039 for interventions 1 and 2 of their respective intervention four. The difference in costs ranged from €561 to €912 for intervention one, €739 to €1350 for intervention two and €1410 to €1618 for intervention three. The 5-year cost-effectiveness ratios (ICERs) for the most comprehensive intervention, intervention four, was €17,000/QALY for two models, €25,000 to +8,000/QALY for three models.