

during treatment of acute lymphoblastic leukemia (ALL) in childhood. **METHODS:** Patients were age five years or older at time of study and enrolled in Dana Farber Cancer Institute 95-001 clinical trial. Parents-of-patients and clinicians, blinded to each other, completed self-administered HUI questionnaires at four assessment points during treatment: Induction of remission, CNS prophylaxis, intensification, and maintenance. Agreement between parents and clinicians, for HUI3 single-attribute and overall health-related quality of life (HRQL) utility scores, was assessed using a single-measure two-way mixed model intra-class correlation coefficient (ICC) and paired t-test. Mean differences in single-attribute and HRQL scores >0.05 and >0.03 , respectively, are clinically important. Statistical significance was set at $p < 0.05$. ICC results were interpreted as follows: >0.50 strong agreement; 0.35 – 0.50 moderate agreement; 0.20 – 0.34 weak agreement; 0.00 – 0.19 negligible agreement. **RESULTS:** There were 375 patients who were surveyed (55.2% males). The number of pairs of parent and clinician assessments varied by assessment point (minimum = 104, maximum = 180). There was moderate or better agreement between raters ($p < 0.05$) at all assessment points for ambulation (ICC = 0.51 – 0.84) and pain (ICC = 0.39 – 0.84). Weak or better agreement ($p < 0.05$) was observed at all assessment points for vision (ICC = 0.23 – 0.79), and emotion (ICC = 0.22 – 0.69). Inter-rater agreement for HRQL ranged from weak to moderate (ICC = 0.31 – 0.50 , $p < 0.05$). There was no significant agreement ($p > 0.05$) for dexterity at any assessment point (ICC = 0.05 – 0.16) and for cognition at Induction (ICC < 0.01). The mean difference (clinician minus parent) was clinically important for HRQL (difference = 0.07 , $p = 0.01$) at Maintenance. **CONCLUSIONS:** Inter-rater agreement varies, from none to strong, by both type of utility score and assessment point. A clinically important mean difference in HRQL scores was observed. Parent and clinician reports should not be considered interchangeable. The results are consistent with studies of ALL patients assessed after completion of therapy.

PCN27**HEALTH STATUS MEASURES AS PREDICTORS OF MORTALITY AMONG ADULTS WITH BRAIN TUMORS**

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OBJECTIVES: The five-year mortality rate for a population of adult brain tumor patients is typically high ($\geq 50\%$). Tumor grade is a well-known predictor for mortality: low-grade (LG) tumors are associated with lower mortality rates than are high-grade (HG) tumors. **METHODS:** Prospective study of consecutive patients newly diagnosed with primary brain tumors attending a single regional centre. A cross-sectional survey collected baseline health status assessments for each patient after diagnosis, and in most cases surgery, but before radiotherapy or chemotherapy. Each participating patient completed a Health Utilities Index (HUI) Mark 2 (HUI2) and Mark 3 (HUI3) 15-item self-complete questionnaire, prior to encounter with assessing physician. The assessing physician, blind to patient's assessment, recorded a Karnofsky Performance Score (KPS) and a Mini-Mental Status Examination (MMSE) score. The life status for each patient was determined for the five-year period after assessment. Proportional hazards models estimated the IHOD for differences of: 0.10 in HUI utility scores; ten units in KPS; and five units in MMSE. Statistical significance was set at the 5% level.

RESULTS: HUI2 self-care was the only health status measure associated with a significant IHOD for LG tumors ($n = 25$): a decrease of 0.10 in HUI2 self-care score being associated with a 30% IHOD ($p = 0.023$). Among patients with HG tumors ($n = 56$), 3 measures were independently significant: KPS (20% IHOD, $p = 0.022$); MMSE (26% IHOD, $p = 0.015$) and HUI3 dexterity (18% IHOD, $p = 0.035$). Two measures, together, were significant among HG patients: MMSE (29% IHOD, $p = 0.007$) and HUI3 dexterity (20% IHOD, $p = 0.020$). **CONCLUSION:** Only HUI measures were significant predictors of IHOD for both LG and HG patients. MMSE and HUI3 dexterity, in combination, were significant predictors for HG patients. The latter is evidence that patient- and physician-reported measures provide important complementary types of information.

PCN28**REVIEW OF ECONOMIC APPRAISALS OF CHEMOTHERAPY FOR METASTATIC COLORECTAL CANCER**

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OBJECTIVES: To assess economic appraisals of chemotherapy regimens for metastatic colorectal cancer (mCRC) published in peer-reviewed journals. **METHODS:** A PubMed search of English-language documents published up to October 2004 was conducted using the search terms: “chemotherapy”, “metastatic”, “colorectal cancer”, and “economic”, “cost-effectiveness”, or “cost-benefit”. Additional publications were identified from references, reviews, and meta-analyses. Publications were reviewed for information on the type of cost analyses, year of publication, journal, country, perspective, type of chemotherapy assessed, data collection methods, sponsorship, and types of sensitivity analyses conducted. **RESULTS:** Economic analyses were published on eight regimens. Seven of the 14 published studies were published from a UK perspective, and 2 each from a French and a Dutch perspective; no study has been published from the US perspective. Ten studies were cost-consequences and four were cost-effectiveness analyses. Limited documentation was provided on sources of costs for medical resource use. Adjustments for quality of life were considered in sensitivity analyses in two studies designed to inform guidance by the UK's National Institute of Clinical Excellence. Overall, drug costs accounted for 1%–37% of total expenditures for 5-fluorouracil + leucovorin (5FU/LV) regimens, in contrast to 47%–83% of total expenditures for newer combination regimens (e.g., irinotecan + 5FU/LV, oxaliplatin + 5FU/LV, capecitabine). No formal analyses were published on Avastin (bevacizumab) or Erbitux (cetuximab). Discounting for future costs and benefits was not done in any analysis. **CONCLUSIONS:** Some prominent novel regimens for mCRC have no publicly available economic appraisal. Among the few published studies on older regimens, most omit components such as quality-of-life adjustments, discounting, and transparent statements on data sources for prices that are recommended in ISPOR's statement on “Good Research Practices—Modeling Studies.”

PCN29**GAPS IN THE ECONOMIC EVALUATION OF PROSTATE CANCER**


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OBJECTIVE: This study seeks to synthesize and identify gaps in the economic literature of prostate cancer (PCA). **METHODS:** English-language abstracts and articles published between 1990

and mid-2005 were retrieved from MEDLINE, conference proceedings, and governmental databases using search terms “prostate cancer”, “prostatic neoplasm”, or similar, combined with a comprehensive list of cost-related search terms. Articles that provided economic data at an individual or societal level were retrieved in full text and analyzed by study type, design, endpoints, results, and other characteristics. **RESULTS:** Of 1169 abstracts retrieved, 186 met the inclusion criteria, of which most (133 articles, 71.5%) were published since 1999. More than half of the economic evaluations were retrospective, based on chart reviews and database analyses (101, 54.3%). Others were prospective evaluations based on clinical trials or observational studies (73, 39.2%), and economic modeling of PCA screening strategies (12, 6.5%). Cost-of-illness studies were completed in eight developed countries. Assessments of cost per treatment and/or per cancer stage (16, 8.6%) and cost per patient (11, 5.9%) were conducted primarily in the U.S., as were cost studies of mass screening (25, 13.4%) and diagnostic modalities (15, 8.1%). Cost evaluations of curative treatments (43, 23.1%) focused primarily on androgen suppression therapy (13, 7.0%), as well as radical prostatectomy (10, 5.4%), radiation therapy (10, 5.4%), or combination therapies (10, 5.4%). Cost assessments of palliative care (21, 11.3%) focused on hormonal therapy (16, 8.6%). Studies of indirect costs, costs of pharmaceutical preventions (e.g. finasteride) and the economic impact of recurrence after treatment failure were scarce or unavailable. **CONCLUSIONS:** As the population ages and as earlier detection become more common, PCA is becoming a more important focus of economic assessment. Cost comparisons among treatments or diagnostic modalities will remain challenging without standardized assessments of clinical outcomes that make evaluation of treatment effectiveness comparable across regimens.

PCN30



WITHDRAWN

PCN31 A METHOD TO REMOVE CONTINUOUS ENROLLMENT REQUIREMENT FROM PHARMAECONOMIC STUDIES

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OBJECTIVE: Continuous enrolment requirement becoming a “rule” rather than “exception” in pharmaeconomical studies. However, continuous enrolment requirement contains potential bias especially patients with incomplete data structurally different from the ones with complete data. Moreover, for studies involving rare diseases the requirement significantly reduces sample size and creates power issues. In this paper, we outline the methodology which can be used to remove continuous requirement. **METHODS:** This is a two stage method. First, we estimate probability of being continuously enrolled using every observation in our data set. This estimation can be done either with parametric methods (such as logit, probit) or non-parametric methods (such as Kaplan-Meier). Then according to these probabilities we create a weight which is inverse of the estimated probabilities at first stage. Using these weights and only observations which are continuously enrolled we estimate weighted least square models at the second stage. Therefore second stage regressions use probabilities containing information from everybody at the first stage. We showed that this eliminate possible selection bias due to continuous enrolment. **RESULTS:** We used medicare claim files for application. A total of 773 patients with incident cases of lung, prostate, colon and breast cancer were analyzed for two years of cost. Continuous enrolment requirement would decrease the sample size to 541 and would create potential selection bias. We estimated the results with and without continuous enrolment requirement and showed that the results are statistically different from each other ($p = 0.000$). **CONCLUSIONS:** Continuous enrolment requirement should not be applied blindly. Data sets created based on this requirement yields consistent results if there is no systematic differences between complete and incomplete observations.

PCN32

MODELING AND ESTIMATING PREFERENCES OVER TREATMENTS FOR BREAST CANCER: APPLIED CONJOINT ANALYSIS WITH PHYSICIANS IN EUROPE AND UNITED STATES

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OBJECTIVES: The relative importance of product attributes for the treatment of breast cancer were derived by applying conjoint analyses in the US and Europe. The possible differences of the prescribing behavior between physicians in Europe and the US were analyzed. **METHODS:** Hypothetical attributes for pharmaceutical products to treat breast cancer in various disease phases were developed. Besides efficacy and side effects the costs for the products were also included as an attribute. Orthogonal scenarios were derived and implemented in the questionnaire. Questions about physician’s background, prescribing behaviors and socioeconomic parameters were also developed and pre-tested. The final survey was done in the US and five different