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, 6.3%). 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.

PCN31

A METHOD TO REMOVE CONTINUOUS ENROLLMENT REQUIREMENT FROM PHARMAECONOMIC STUDIES

Baser O
Thomson-Medstat, Ann Arbor, MI, USA

OBJECTIVE: Continuous enrolment requirement becoming a “rule” rather than “exception” in pharmacoeconomic 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 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

Walzer S1, Memran M2, Morlotti L1
1Analytica International, Loerrach, Germany, 2Analytica International, New York, NY, USA

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
European countries (France, Germany, Italy, UK). Additionally it was tested which influence a generic product would have on the relative importance of product attributes. RESULTS: The conjoint analyses resulted in the fact that there were major differences between the relative importance of attributes between physicians in Europe and the US. In the US efficacy was the most preferable attribute. Even when a generic drug would enter the market efficacy would still be the most important attribute—one on a lower level than for the “branded” product market but still the most important. In Europe the most important attribute was the cost. Even when a generic product would enter the market the costs would be the most important factor. CONCLUSIONS: The discussions about the increasing health care costs across Europe could have a major impact on the potential prescribing behavior of physicians. Even in the breast cancer market which is highly under public view the pressure on health care budget is changing the relative importance of products. In the US where these discussions are not as intensive as in Europe this conclusion cannot be found.

PCN13

MAPPING FACT-P AND EORTC QLQ-C30 TO THE EQ-5D

HEALTH UTILITY IN METASTATIC HORMONE-REFRACTORY PROSTATE CANCER PATIENTS

Wu E1, Mulani P2, Farrell MH1, Sleep D2

1Analysis Group, Inc, Boston, MA, USA, 2Abbott Laboratories, Abbott Park, IL, USA

OBJECTIVES: To construct and validate a prediction model of health utility (EQ-5D) for metastatic hormone-refractory prostate cancer (HRPCA) patients using cancer-specific health-related quality of life (HRQL) measures. METHODS: Data were obtained from a multicenter, multinational observational study of metastatic HRPCA patients conducted during 2002–2004. In addition to clinical and resource utilization, health utility (EQ-5D) and HRQL (Functional Assessment of Cancer Therapy—Prostate [FACT-P] and European Organization for Research and Treatment of Cancer Quality of Life Questionnaire [EORTC QLQ-C30]) data were collected. Predictive validity of ordinary least square (OLS), Tobit, and median regressions of various model specifications were tested using cross-validation samples. The selected specification was then further refined and tested for alternative model specifications and restrictions. RESULTS: OLS regression with both HRQL measures as individual components and patient demographics was the best performing model. It explained 58.2% of the observed EQ-5D variation in the validation sample. A model including only the prostate cancer–specific HRQL measure, FACT-P, explained 53.5% of the observed EQ-5D variation. Both models have good ability to distinguish patients with high health utility from those with low utility for cutoff points between the 20th and 80th percentiles of observed EQ-5D values. CONCLUSIONS: The prediction models developed have good predictive validity. These algorithms enable researchers to translate cancer–specific HRQL measures to health utility in metastatic HRPCA patients. The findings will help perform utility adjustments in cost-utility analyses.

PCN34

VALIDATION OF AN INTERNET-BASED PATIENT

HEALTH-RELATED QUALITY OF LIFE QUESTIONNAIRE:

DATA FROM CAPSURE

Broering JM1, Lessard SC1, Marr PL1, Elkin EP1, Lewis KR1, Olesek G2, Carroll PR1, DuChane J1

1University of California, San Francisco, San Francisco, CA, USA, 2Pharmaceutical Products, Inc, Lake Forest, IL, USA

OBJECTIVES: The purpose of this validation study was to test the accuracy and acceptability of an Internet-based questionnaire (Qx) assessing health-related quality of life (HRQoL) among subjects in CapSURE, a longitudinal study of health outcomes among men with prostate cancer. METHODS: Active participants were sent a flyer with their usual bi-annual Qx offering the opportunity to test the new Internet version and were paid $25 for their participation. Volunteers were randomized to one of two Qx administration groups (paper-then-Internet or Internet-then-paper). The SF-36 and the UCLA Prostate Cancer Index (PCI) comprised the HRQoL Qx. A 10-item survey designed to measure patient preference of administration was administered after completion of both modalities. Descriptive statistics, Pearson correlation coefficients, and percent agreement were used to assess comparability between these two methods of administration. RESULTS: A convenience sample of 245 subjects volunteered to participate; 209 (85%) completed both paper and online Qx. Subject median age was 63 years-old (range 46–83). The majority of respondents were white (97%), college educated (66%) and had an income of >$75,000/year (46%). With few exceptions, correlation coefficients for the HRQoL multi-level items were high (0.66–0.97) and the percent agreement for yes/no items was also very high (≥0.89). Subjects rated both methods of administration favorably, although the Internet was rated as somewhat more convenient and faster to complete. There were no differences between the two versions on respondent ratings for ease of reading, ease of answer completion, confusion or stress. 70% preferred the Internet mode; 21% had no preference and 9% preferred paper. CONCLUSIONS: Administration of the HRQoL Qx, including SF-36 and PCI domains, demonstrated a high correlation between the Internet and the paper-and-pencil methods. The Internet was a well-accepted mode among this select group of older men with prostate cancer.