expertise, patient indication, institution guidelines and cultivated practice. Regional authorities reimburse chemotherapeutics according to different tariffs and codes. **METHODS:** A systematic literature review of the bibliographic databases Medline and Embase was performed. In addition, hand searching of reimbursement databases, national reimbursement tariffs and semi-structured interviews with expert oncologists were completed. Data extraction and evidence synthesis from these sources formed the basis for this evaluation. **RESULTS:** Fifty-nine publications (16 manuscripts, 29 study protocols, 14 EMEA Public Assessment Reports) and nine expert interviews across four countries were included. The eight mNSCLC drugs and their seven combinations result in a wide set of administration patterns with variation in treatment schedules, number of interventions per patient, and difference in treatment settings in terms of inpatient versus outpatient approaches. Calculation of the 6 monthly administration cost of seven drug regimes for mNSCLC in France, Germany and Spain results in a range of €2,970 to €19,792, most affected by inpatient or outpatient administration setting. **CONCLUSIONS:** The following factors were found to result in variations in administration costs: setting (i.e. inpatient/outpatient); frequency of administration (e.g. weekly); duration of single administration (10–120 minutes); length of cycle (total number of administrations) type of cycle length (fixed or flexible); health care professional administering (e.g. nurse or physician); concomitant drugs (e.g. saline) and drug dosage. Together with differences in country-specific reimbursement tariffs, these factors create significant variation in administration patterns and costs associated with the delivery of drugs for mNSCLC.

CANCER – Patient-Reported Outcomes Studies

PCN130

HEALTH UTILITIES OF CHILDREN TREATED FOR ACUTE LYMPHOBLASTIC LEUKEMIA (ALL) IN DFCI 95-01 RANDOMIZED CLINICAL TRIAL

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OBJECTIVES: To assess the overall health-related quality of life (HRQL) of children diagnosed with ALL across major phases of therapy and identify areas for remediation. **METHODS:** All children registered in the trial at participating centres (n = 5) and 5+ years of age at assessment were eligible. HRQL assessments were collected from parents using Health Utilities Index Mark 3 (HUI3) during 4 standard phases of therapy: induction (4 weeks); CNS prophylaxis (3); intensification (30); continuation (71). Differences in mean HRQL utilities were tested using ANOVA for demographic (age and gender) and clinical factors: risk status; phase; and randomization group. Statistical significance was $p < 0.05$ with multiple-testing adjustments. Quality-adjusted life years (QALYs) were calculated by phases for patients and general population controls. Frequency distributions identified attributes affected. **RESULTS:** 600 assessments were collected. Overall completion rate was 77%. Mean utilities differed ($p < 0.001$) among phases: 0.67 induction; 0.75 CNS; 0.79 intensification; 0.87 continuation. There were no differences in mean utilities for demographic or clinical factors. QALY estimates were, for patients and controls: 0.05 and 0.07 induction; 0.04 and 0.05 CNS; 0.46 and 0.54 intensification; 1.19 and 1.27 continuation. Most of the total QALY difference was from intensification (42%) and continuation (42%). Pain was the HUI3 attribute most frequently affected among patients: 52% during intensification and 37% during continuation. Combinations of HUI3 disabilities were common. During intensification, 65% of patients with moderate/severe emotional disability also had moderate/severe pain. During continuation, 67% of patients with moderate/severe ambulation disability also had moderate/severe pain. **CONCLUSIONS:** The vast majority of QALYs lost by patients was associated with two phases of treatment and one health attribute. Future research to improve HRQL during treatment for ALL should focus on reducing pain during intensification and continuation phases.

PCN132

UTILITY LIBRARY TO CAPTURE UTILITIES IN THE AREA OF ONCOLOGY

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OBJECTIVES: There is a growing literature of health state utility values in oncology, providing researchers with an increasing opportunity to draw on existing published values rather than obtaining new data. A review of utility studies would identify existing values and gaps in the current literature. Our objective was to conduct a rapid, comprehensive literature review capturing oncology specific utilities and disutilities for adverse events, associated with therapeutic area of oncology, in order to develop a utilities library. **METHODS:** A comprehensive search string and pre-determined eligibility criteria guided a search of Embase.com and the Cochrane Library focusing on primary papers and recent robust systematic reviews published from 1999–2009. To guide data extraction and construct the utility library, categories were created and included cancer type; treatment information; methods of utility capture; and utility/ disutility value/range. **RESULTS:** We identified 362 studies estimating utility and disutility values in oncology, in a wide range of cancer types. Breast and prostate cancers were the most commonly investigated (n = 91 and n = 49 respectively). Comparably, a paucity of utility values were reported for other cancers. Methods of utility elicitation varied in robustness and wide-ranging values were reported. The most common method of utility capture was EQ5D followed by the HUI and the Time-Trade-Off or

Standard Gamble techniques. Conversely, only 1 study employed the SF-6D. Although the most common causes of cancer-related deaths are lung and colorectal cancer, we found fewer studies eliciting utilities for these cancers relative to breast and prostate cancers (n = 21 and n = 27 respectively). **CONCLUSIONS:** This study demonstrates the value in reviewing literature estimating utilities and disutilities in oncology. It highlights areas in oncology where identified utility values may be combined to produce more robust values and examine sources of variation.

PCN133

POPULATION PREFERENCES FOR TREATMENT OUTCOMES IN CHRONIC LYMPHOCYTIC LEUKEMIA

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OBJECTIVES: Given that treatments for chronic lymphocytic leukaemia (CLL) are palliative rather than curative, evaluating the patient-perceived impacts of therapy is critical. To date, no utility studies from the patient or general public perspective have been conducted in CLL. Thus, the objective of this study was to measure preferences for health states associated with CLL treatment. **METHODS:** This was a cross-sectional study of 89 members of the general population in the UK (England and Scotland). Using standard gamble, each participant valued four health states describing response status, six describing treatment-related toxicities based on Common Toxicity Criteria, and two describing line of treatment. The health states incorporated standardized descriptions of treatment response (symptoms have "improved," "stabilized," or "gotten worse"), swollen glands, impact on daily activities, fatigue, appetite, and night sweats. Utility estimates ranged from 0.0, reflecting dead, to 1.0, reflecting full health. **RESULTS:** Complete response (CR) was the most preferred health state (mean utility, 0.91), followed by partial response (PR), 0.84; no change (NC), 0.78; and progressive disease (PD), 0.68. Among the toxicity states, grade I/II nausea and nausea/vomiting had the smallest utility decrements (both were −0.05), and grade III/ IV pneumonia had the greatest decrement (-0.20). The utility decrements obtained for toxicity states can be subtracted from utilities for CR, PR, NC, and PD, as appropriate. The utilities for second- and third-line treatments, which are attempted when symptoms worsen, were 0.71 and 0.65, respectively. In general, the sample was well-matched according to the age and sex distribution for the adult UK population. No significant differences in utilities were observed by age, sex, or knowledge/experience with leukaemia. **CONCLUSIONS:** This study reports UK population utilities for a universal set of CLL health states that incorporate intended treatment response and unintended toxicities. These utilities can be applied in future cost-effectiveness analyses of CLL treatment.

PCN134

VALIDATION OF A KOREAN TRANSLATION OF CANCER THERAPY SATISFACTION QUESTIONNAIRE (CTSQ): A PILOT STUDY

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OBJECTIVES: Cancer patients' preferences and assessment of the risks and benefits associated with cancer therapy may influence their decisions to continue their treatment and eventually determine their satisfaction with the outcomes of treatment. The main objective of this study was to validate a Korean translation of the Cancer Therapy Satisfaction Questionnaire (CTSQ) for use in Korea to assess expectation and satisfaction with the treatments of traditional Korean medicine and integrative cancer therapy, combined western and traditional Korean medicine (TKM) received. **METHODS:** To evaluate the conceptual equivalence and consistency of the items and scales, forward translation, reconciliations, backward translation, and focus group discussions were performed. After completing translation procedures, a pilot test was conducted for cognitive testing. The Korean translation of CTSQ was completed by 14 cancer patients treated by Korean traditional medicine and 10 patients by integrative cancer therapy. **RESULTS:** Of 14 patients with TKM only and 10 patients with integrative therapy, gender distributions were similar. The mean (+/–sd) age were 53.2(+/–13.7) and 55.2(+/–10.7) years for the TKM only and Integrative therapy group, respectively. Most patients were stage 4 (88.9%). Cronbach's alphas for the internal consistency reliability of three domains, Expectations of Therapy (ET), Feelings about Side Effects (FSE), Satisfaction with Therapy (SWT) were 0.78, 0.68, and 0.77, respectively. In the TKM group, mean scores of ET, FSE, and SWT domains were 81.8+/–16.6, 80.8+/–22.9, and 82.1+/–14.3, respectively, whereas in the integrative therapy group, mean scores were 86.0+/–11.5, 76.9+/–21.3, and 77.0+/–12.3, respectively. **CONCLUSIONS:** These results support the applications of the Korean CTSQ for the field test in full scale assessing treatment satisfaction associated with both integrative cancer therapy and a single traditional Korean medicine.

PCN135

USING THE FACT-LEUKEMIA SUBSCALE TO EVALUATE QUALITY OF LIFE IN LEUKEMIA PATIENTS WORLDWIDE

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OBJECTIVES: Translation of patient reported outcomes (PRO) measures is an essential component of research methodology in preparation for multinational clinical