MEDICAL TREATMENT FOR CHRONIC MYELOID LEUKAEMIA (CML): AVERAGE COST EFFECTIVENESS RATIOS OF FIRST AND SECOND LINE TREATMENT

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OBJECTIVE: To determine the average cost-effectiveness ratios of interferon used first line and imatinib used second line in chronic phase CML. METHODS: A general cost effectiveness analysis was performed. Therefore, a model consisting of two phases is developed: an induction phase of eight months, in which newly diagnosed patients are treated with two different doses of IFN or patients refractory to IFN are treated with imatinib, and a chronic treatment phase where patients are treated according the result of the induction phase. Costs and effects are modeled for a maximum of 25 years. Input for this model was derived from literature and expert opinion. Costs are based on real cost prices and tariffs. RESULTS: Compared to first line IFN, treatment with imatinib second line gives greater quality adjusted life years (QALYs); 4.98 versus 6.67. Average costs of treatment with 5MIU IFN are €76,969 and with 3MIU IFN €53,257. For treatment with imatinib the total costs are €140,765 per patient. Average cost-effectiveness ratios in the 5MIU IFN group is €15,445 per QALY and €10,687 in the 3MIU IFN group. Using imatinib second line the average cost-effectiveness ratio is €21,082 per QALY. CONCLUSION: The addition of imatinib to the treatment options in CML suggests that the costs of treatment will rise but average survival and quality of life will also considerably increase. The average costs per QALY are in our view fully acceptable.

CANCER—Quality of Life/Preference Based Outcomes

AGREEMENT OF HEALTH UTILITIES INDEX SCORES AMONG SURVIVORS OF CANCER IN CHILDHOOD, THEIR PARENTS AND THEIR DOCTORS IN URUGUAY

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OBJECTIVES: The study assesses inter-rater agreement of Health Utilities Index (HUI) measures reported for 103 survivors of cancers in childhood and 98 age-matched controls (C) in Montevideo, Uruguay. METHODS: The children completed face-to-face interviewer-administered HUI health status questionnaires, Spanish language version. Parents (P) and doctors (D) of the survivors, and parents of 22 controls completed proxy-assessments. Inter-rater agreement of HUI3 single-attribute and health-related quality of life (HRQL) utility scores was assessed between children and parents, children and doctors, and parents and doctors using intra-class correlation coefficients (ICC). RESULTS: Agreement results vary by attribute (vision, hearing, speech, ambulation, dexterity, emotion, cognition, pain) but most are substantial (ICC > 0.60). Due to lack of measurement variability, agreement could not be assessed for HUI3 dexterity. As hypothesized, agreement is generally substantial between children and parents. ICC for overall HRQL and individual attributes vision, hearing, speech, ambulation, cognition, and pain, varying from 0.554 to 0.999 and all are significant at p < 0.0005. There is only slight agreement (ICC < 0.20) for the highly subjective emotion attribute, and that is consistent across all pairs of raters. Agreement between children and doctors, and parents and doctors is strongest for easily observed attributes, including vision, hearing, speech and ambulation (p < 0.005), and weakest for the less observable attributes (pain, cognition and emotion). CONCLUSIONS: Results indicate that parents are reliable proxies for assessing overall HRQL of their children but parents and doctors may not have sufficient knowledge or insight into the pain, cognitive or emotional burdens suffered by these young cancer survivors. These results are consistent with those reported from an English-language study of survivors of brain tumours in childhood in Hamilton, Canada. This consistency between studies validates both the results and the Spanish-language translation of the HUI.

SPECIFIC CHOICES AND EXPENDITURES FOR HERBAL MEDICINES BY CANCER PATIENTS

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OBJECTIVES: The use of alternative medicine is increasing worldwide with total annual expenditures on herbal medicine and/or supplements approaching 10 billion dollars in the US alone. Cancer patients often feel uncomfortable discussing the use of herbals. This survey study was designed to identify the types of herbals used, evaluate the patients' expectation of results of use, communication with the physician regarding use, out-of pocket expenditure and possible correlations between these and other demographic factors. METHODS: A survey consisting of 17 questions was developed with a list of herbal medications purchased by the patient. The instrument was administered with the assistance of a nurse or pharmacist to 450 patients in the Pre-op and Symptom and Palliative Care Clinic (SCPC), 300 and 150 respectively. The type and stage of cancer were retrieved from the

chart. **RESULTS:** An equal number of male and female were enrolled. For those patient using herbals the mean age for the Pre-op clinic and SCPC was 60 and 55 years, respectively. Of those taking herbal medication, 41% indicated they started after their cancer diagnosis. Overall, 64–74% of patients spent $25 or less per month with an additional 23–28% spending up to $100 and 3–8% spending over $100. Patients reported taking herbal medications to cure their disease, feel more in control, help with conventional therapy, and help control symptoms. Sixty-six percent of the SCPC group and 70% of the Pre-op group had informed one of their physicians of herbal use. There were no statistical correlations between any of the demographic or other parameters report in the survey. **CONCLUSION:** As the use of herbal medications and other alternative treatments increase for the cancer population it is important for health care professionals to understand their use by the patient and incorporate these treatments into the patient care plan.

A WEIGHTED INDEX FORM OF THE FACT-L FOR USE IN ECONOMIC EVALUATION

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FACT-L is a 44-item multidimensional measure of quality of life developed for use in evaluating treatment of lung cancer. Patients self-rate items on 0 to 4 scale corresponding to "not at all" and "very much". Regulatory and other approval bodies increasingly demand preference-weighted measures of outcome. For economic analysis it is generally held that such weights should be utilities. The pressing need for users of condition-specific measures such as FACT-L is a scoring system that meets the requirements of regulatory and other non-clinical users. This paper describes the successful completion of that task. **OBJECTIVES:** The primary purpose of the study was to develop a set of weights for converting FACT-L into a index measure for use in cost-utility analysis. **METHODS:** The descriptive complexity of FACT-L had been reduced in a preliminary study that resulted in the identification of 10 key items covering the 6 dimensions of the FACT-L. These were used to define 2 sets of 10 health states, each presented in a 14-page questionnaire together with EQ-5D. Health states were valued on a 0–100 scale corresponding to worst-best possible health. A value for dead was also recorded. A random sample of 4000 individuals was drawn from the Electoral Registers of England Scotland and Wales who were mailed questionnaires during September 2002. **RESULTS:** Four hundred twenty-five (11%) returned a completed questionnaire. Conjoint analysis and OLS regression were used to estimate the marginal utilities for the 6 FACT-L dimensions. Decrements for each of the 10 key FACT-L items were also computed. Utilities for FACT-L health states range from 0.738 to 0.146. **CONCLUSIONS:**

Despite the response rates, valuations from a representative sample of the general population were obtained for critical FACT-L items enabling a utility-weighted index score to be derived from patient self-assessments for use in economic evaluation.

ASSESSMENT OF PATIENT-REPORTED OUTCOMES AMONG PATIENTS WITH PROSTATE CANCER

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OBJECTIVE: To compare the psychosocial status and functional limitations in prostate cancer patients with patients diagnosed with other types of cancer in a national sample of US adults. **METHODS:** This study compared perceived health status, mental health status, and physical limitations among prostate cancer patients with patients of other cancers using the 1998 Medical Expenditure Panel Survey (MEPS). Men over 18 years reported to have only one type of cancer (ICD-9-CM = 140 to 239) were included in the analysis. Men with colorectal cancer or lung cancer and women with breast cancer were selected for further comparison in the health and mental health status categories. All analyses used patient-specific sampling weights provided by MEPS and were adjusted for age and number of co-morbid conditions. **RESULTS:** Approximately 750,000 men were identified with prostate cancer and an additional 4.6 million male patients were identified with one other type of cancer. Fewer prostate cancer patients reported having "excellent" or "very good" health (51%) compared to patients with other oncology diagnoses (66%). Individuals with prostate cancer reported poorer health status than patients with all other types of cancer (2.9 vs. 2.6, respectively) and poorer mental health (2.3 vs. 2.1, respectively). Specifically, compared to men with colorectal cancer, patients with prostate cancer reported poorer health and mental health status. Prostate cancer patients also have an increased odds of requiring assistance with ADL and IADL (1.22 and 1.26, respectively) than patients with all other types of cancer. **CONCLUSIONS:** Despite a prolonged life expectancy, we found that prostate cancer has a greater impact on patients' perception of health than other types of cancer. Prostate cancer patients also reported more limitations in functional ability compared to other types of cancer combined. These findings indicate that in addition to identifying treatments that improve important clinical parameters, an emphasis should be placed on improving other health attributes important to prostate cancer patients (e.g., quality of life, satisfaction with treatment).