A72 Abstracts

PCN58

A COST UTILITY ANALYSIS OF ERLOTINIB IN PATIENTS WITH PREVIOUSLY TREATED ADVANCED NON-SMALL-CELL **LUNG CANCER (NSCLC)**

 $\underline{Bradbury\ PA}^{I}, Jang\ R^{I}, Isogai\ P^{2}, Ng\ R^{I}, Mittmann\ N^{2}, Evans\ W^{3},$ Shepherd FA1, Leighl NB1

¹Princess Margaret Hospital/University Health Network, Toronto, ON, Canada, ²HOPE Research Centre, Toronto, ON, Canada, ³Juravinski Cancer Centre, Hamilton, ON, Canada

OBJECTIVE: Erlotinib, a novel targeted anticancer therapy, improves survival and quality of life (QoL) in patients with advanced NSCLC after chemotherapy failure. The incremental cost effectiveness ratio (ICER) of erlotinib based on a randomized placebo-controlled trial, (NCIC CTG BR.21) is \$95,869 (2007 CDN), per life-year gained (LYG). Here we perform a cost utility analysis (CUA) of erlotinib in patients with advanced NSCLC, and explore novel methodology to utilize QoL data collected using the EORTC QLQC30 tool. METHODS: Previously published resource utilization and QoL data from patients recruited as part of the NCIC CTG BR.21 clinical trial were used. Utility weights were derived from the prospective collection of the EQ5D in a separate cohort of advanced NSCLC patients receiving erlotinib or supportive care alone. QoL was also prospectively collected using the EORTC QLQC30. Correlation between utility (EQ5D) and QoL in the cohort is being explored, and will be applied to published QoL data from the NCIC CTG BR.21 trial data. RESULTS: Prospective data from the EQ5D and EORTC QLQC30 were obtained from 64 patients with NSCLC, 31 receiving erlotinib and 33 supportive care. The mean utility derived for those treated with erlotinib was 0.772, and for those not receiving erlotinib was 0.754. The mean incremental cost of erlotinib over supportive care was previously derived as \$12,303, mean survival 0.13 years, and quality-adjusted survival improvement with erlotinib treatment in advanced NSCLC based on published data from the NCIC CTG BR.21 trial was estimated at 0.11 QALY, with an ICER estimated at approximately \$110,321 per QALY CONCLUSION: The cost utility of erlotinib in patients with advanced NSCLC is estimated at \$110,321 per QALY (CDN\$ 2007); a parallel investigation to evaluate methodology to utilize EORTC QLQ30 QoL data is underway.

PCN59

TIME COSTS AND OUT-OF-POCKET COSTS OF PROSTATE **CANCER SURVIVORS IN ONTARIO, CANADA**

Carcone SM¹, Bremner KE¹, Kowgier ME², Krahn MD¹ ¹University Health Network, Toronto, ON, Canada, ²University of

Toronto, Toronto, ON, Canada

OBJECTIVE: To estimate out-of-pocket costs (OPC) and time costs (TC) for prostate cancer (PC) care in PC survivors. METHODS: Surviving PC patients residing in Ontario, and diagnosed in 1993-4, 1997-8, or 2001-2, were selected from the Ontario Cancer Registry (n = 1961). A self-report questionnaire was completed, which asked about health care and lost time associated with PC in eight key areas: 1) health care professional visits, and accompanying person; 2) medication use; 3) equipment purchased; 4) community service use; 5) employment time lost; 6) problems with household chores; 7) leisure time lost; and 8) health care insurance. Time was valued according to the average hourly wage in 2006 in Canada. RESULTS: 670 patients returned completed questionnaires. The mean annual OPC and TC of PC care was \$1093/patient. Mean annual OPC were estimated to be \$349/patient. Patients incurred an average of \$319 annually for health professional visits and diagnostic tests. Sixty-nine percent (n = 462) of patients visited at least one health care professional; 43% visited an urologist, 18% visited a family

physician, and 15% visited a radiation oncologist. Individuals who visited a radiation oncologist incurred the greatest mean annual TC (\$289), followed by patients who visited an urologist (\$223) and family physician (\$151). Only 26% of patients were employed for pay; 5 patients reported difficulty working. Mean annual productivity loss was estimated at \$225 per patient. CONCLUSION: TC associated with work loss does not represent a major economic burden among PC patients because a minority are working, and impact among those who work is modest. OPC, in a country with universal health insurance, is similar in magnitude to the annual attributable direct medical costs among stable PC outpatients (\$349 vs. \$303). Data from this study will be used, along with outcome data gathered from the same patients, to develop a Canadian PC policy model.

PCN60

EFFECT OF DEMOGRAPHIC FACTORS AND SOCIAL ECONOMIC VARIABLES ON HEALTH CARE RESOURCE UTILIZATION AND EXPENDITURE FOR BREAST CANCER **PATIENTS USING MEPS 2004**

Zhan L, Nair RR, Black CD, Pinto SL, Holiday-Goodman M The University of Toledo, Toledo, OH, USA

OBJECTIVE: To examine the influences of demographic and socioeconomic factors on the health care resource utilization and expenditure for breast cancer patients in MEPS 2004. METHODS: A retrospective secondary database study was conducted using the 2004 Medical Expenditure Panel Survey (MEPS). Patients with breast cancer ≥ 18 years (ICD-9-CM = 174, 175, V10.3, 233 and CCC code = 024) were included in the analysis. Poisson regression and Generalized Linear-Gamma model were employed to examine how demographics and socioeconomics variables predicted the difference in total health care resource utilization and total expenditure. In order to generalize the results to the whole U.S. population, sample weight from MEPS was utilized. RESULTS: A total of 121 female patients were included in the study. Approximately 52.9% of them were over 65 years old; 85.1% were Caucasian women; 52.9% were married; 27.3% had Bachelor's degree or above; 76.0% were urban; 62.0% were unemployed; 67.8% had high family income; 97.5% had insurance. Caucasian women in the age group 50-64, who were living in the rural area and had lower family income, utilized more health care resources. Employment and family size were not found to significantly influence health care resource utilization. CONCLUSION: This study provides insight into factors related to health care resource utilization and expenditure. Demographic and socioeconomic factors did influence health care resource and expenditure differently. This study may help policy makers in optimal decision-making based on the factors included in the study. Future studies can look into other factors such as treatment regimen, stage of the disease to explain differences in health care resource utilization and expenditure patterns.

CANCER—Patient-Reported Outcomes

PCN61

EARLY DISCONTINUATION OF ADJUVANT ENDOCRINE TREATMENT OF BREAST CANCER

Bowen KL, Owerbach J

Excellus BlueCross BlueShield, Rochester, NY, USA

OBJECTIVE: To estimate the rate of early discontinuation of oral adjuvant endocrine therapy by women with early-stage breast cancer in a commercially insured population. METHODS: The study sample consists of all women from a commercially