

$p < 0.0001$. Subjects with lower scores had worse survival: HR 1.6 (95% CI 1.2, 2.0), $p < 0.0002$. **CONCLUSION:** QoL measures underestimate utilities. The weighted global QoL and utility scores had discriminative and predictive validity in advanced cancer. Our work enables QoL data obtained with a simple questionnaire to be converted into optimally weighted measures that can be used in clinical trials to: describe the net effect of cancer treatments on QoL; evaluate trade-offs between quality and quantity of life using quality-adjusted survival analysis; and do cost-effectiveness analyses based on cancer patients' preferences.

CN3

EFFECTIVENESS OF EPOETIN ALPHA VERSUS DARBEPOETIN IN CHEMOTHERAPY-INDUCED ANAEMIA IN THE GERMAN SETTING

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OBJECTIVES: To analyze the effectiveness of Darbepoetin alpha and Epoetin alpha administered in patients with chemotherapy-induced anaemia (CIA) in the German setting considering the dosing schedules recommended in Germany. **METHODS:** Published prospective, randomized and controlled studies with either Epoetin alpha administered once weekly (EPO-QW), Darbepoetin administered QW (DARB-QW) and once every three weeks (DARB-Q3W) were extracted. Mean haemoglobin area-under-the-change-curve (HB-AUC) was selected as the effectiveness parameter, calculated by inclusion of all available haemoglobin values in the chosen time frame of 12 weeks. Mean administered doses and transfusion requirements were analysed. Number of study patients were accounted for. **RESULTS:** Eleven study arms were identified satisfying the inclusion criteria. Mean baseline HB for EPO-QW, DARB-QW and DARB-Q3W varied between 9.5–10.4 g/dl, 9.4–9.9 g/dl, and 9.8–9.9 g/dl respectively. The increase in HB levels from baseline to week 12 varied between about 1.0 g/dl–2.9 g/dl, 1.1 g/dl–1.6 g/dl, and about 1.0 g/dl. Calculated mean HB-AUC value for EPO-QW, DARB-QW and DARB-Q3W were 11.75, 8.84 and 8.08, respectively. Mean administered doses reported were 39,949 IU / week and 42,714 IU / week for EPO-QW, 2.2 µg/kg weekly, 1.59 µg/kg weekly, 2.05 µg/kg weekly for DARB-QW and 1.87 µg/kg weekly mean dose per kg for DARB-Q3W. Information on transfusion rates differed, for two study-arms transfusion requirements were not reported at all. **CONCLUSION:** Comparative studies are not available for the recommended and labeled regimens in Germany. Quality and amount of reported data needed for comparing clinical effectiveness from different study arms differ very much. Administered doses, transfusion rates and detailed HB increase were not available for all studies. Considering HB-AUC as the key comparison criterion Epoetin alpha administered once weekly is more effective.

CN4

COST-EFFECTIVENESS OF PEGYLATED LIPISOMAL DOXORUBICIN VS. CONVENTIONAL DOXORUBICIN IN AVOIDANCE OF CARDIOTOXICITY FOR METASTATIC BREAST CANCER IN THE FIRST TREATMENT YEAR

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OBJECTIVES: Despite demonstrated efficacy of anthracyclines in metastatic breast cancer (MBC), strong evidence links these

agents to development of reduced left ventricular ejection fraction (LVEF) and congestive heart failure (CHF). We examined the cost-effectiveness of using pegylated liposomal doxorubicin (PLD) to reduce cardiotoxicity. **METHODS:** A Markov model was developed to simulate the use of PLD vs. conventional doxorubicin (DOX) in the first 48 weeks after initiation of therapy. Our reference case was a 58 year old female newly diagnosed with MBC. Data from a large-scale clinical trial was used to model the incidence of CHF. The perspective was the provincial authority in Ontario, Canada. Costs included direct costs of chemotherapy, oncology and hospital services for managing MBC, as well as medical management for treating cardiotoxicity. Since trial data showed that patients with prior anthracycline exposure (15%) had a relative risk of 2.8 for LVEF, and 4.1 for progression to CHF, we adjusted for prior anthracycline exposure which is greater in the adjuvant setting (80% in Ontario). A previously developed cardiotoxicity risk model was used to identify high-risk patients. Analyses were performed for: 1) all patients, 2) subset of high-risk patients. **RESULTS:** For DOX, 40% experienced cardiotoxicity, with 18% developing CHF. These rates were 54% and 33% in high-risk patients. For PLD, no patients developed CHF, but 9% overall and 14% of high-risk patients developed LVEF. Using PLD instead of DOX was associated with an incremental cost of CAD\$75,513 per patient spared CHF, \$49,952 in high-risk patients. **CONCLUSION:** In the first treatment year, the greatest cost-effectiveness gain was avoidance of CHF in high-risk patients. In Ontario, where the vast majority of patients are high-risk, a large percentage of patients would be expected to avoid CHF by using pegylated liposomal doxorubicin instead of conventional doxorubicin.

PODIUM SESSION II: ECONOMIC STUDIES I

ESI

INCREMENTAL DIFFERENCES IN RESOURCE UTILIZATION AND COSTS OF TREATING PERSONS INFECTED WITH HIV IN A LOW SOCIOECONOMIC NEIGHBORHOOD

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OBJECTIVES: To measure the mean incremental differences in health services utilization and costs for individuals infected with HIV compared with individuals not infected with HIV who reside in the Downtown Eastside (DTES) of Vancouver, Canada. **METHODS:** We utilized data from the Community Health And Safety Evaluation (CHASE) Project, a prospective cohort study undertaken to measure health care utilization. A representative sample of residents living in the DTES were recruited beginning February 2003 and followed until March 31, 2004. Self-reported information was collected at baseline and included sections on sociodemographics, education, employment, housing, and illicit drug use. This information was linked to administrative health records on HIV-status, hospitalizations, outpatient consultations, and dispensed medications. Health expenditures included costs of hospitalizations (estimated using length of stay and the mean per-diem), outpatient visits and medications and were analyzed using random effects linear regression models and reported in 2004 \$CDN. **RESULTS:** The analysis consisted of 2,905 individuals who were successfully linked with at least one of the linked databases. There were 459 (15.8%) HIV-positive and 2456 HIV-negative participants. All utilization and cost estimates were significantly higher for individuals infected with HIV, both crudely and after adjustment. Individuals infected with HIV had