

Discussion: This model shows that the difference in TWS, TWiST and the Q-TWiST proxy are significant. It further suggests that the benefits of a TWiST or Q-TWiST approach in advanced ovarian cancer can transparently highlight serious adverse events (toxicity) in the outcome as well as the costs to a decision-maker. Showing both TWS, TWiST and Q-TWiST outcomes may give the decision-maker greater scope for evaluating treatments. These outcomes are further relevant to oncology where serious adverse events play a critical role in patient well-being. Q-TWiST values are being derived to truly reflect patient preferences for different health states.

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OP4. Cost-effectiveness of Irinotecan (CPT-11) and best estimated chemotherapy regimen in patients with metastatic colorectal cancer after failure of 5fluorouracil (5FU) containing regimen: Results based on a phase III trial

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Background: Increased survival due to aggressive chemotherapy in metastatic colorectal cancer may be considered as a major breakthrough as long as patients' Quality of Life is not unduly jeopardized by toxicity. The issue of whether response or stabilization bring benefit in terms of Quality of Life (QOL) despite toxicity effects is still controversial. In addition, given the high acquisition cost of new chemotherapies, it is becoming more common to conduct economic evaluations comparing these new chemotherapies to older alternatives, that is to compare simultaneously their impact on costs (acquisition, administration, management of toxicities, complications) and on consequences (survival, other clinical benefit, QOL).

Methods: A randomised multi-center phase III trial has been conducted comparing CPT-11 as single agent to best estimated 5FU based chemotherapy regimen (single agent or combinations) in patients with metastatic colorectal cancer who have previously failed a 5FU containing regimen. Primary endpoint was survival. Median time to progression, response rates and symptom assessment were evaluated as secondary endpoints. QOL was assessed using the EORTC QLQ-C30. Use of hospital and ambulatory resources were also recorded.

Results: 267 patients have been enrolled with a median follow-up of 11 months. Final clinical results are currently being compiled, as well as QOL and resources usage, and will be presented. This will be one of the first economic evaluations in medical oncology based on prospectively collected data as part of a phase III clinical trial.

Discussion: Results of the economic evaluation based on this phase III trial will be compared to those obtained from modelling, and to results found in the literature.

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OP5. Economic evaluation of chemotherapy with Mitoxantrone plus Prednisone for symptomatic hormone resistant prostate cancer based on a Canadian randomised trial with palliative endpoints

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Background: A recently published Canadian randomised trial with palliative endpoints in patients with symptomatic hormone-resistant

prostate cancer found reduction in pain and improvement of health related quality of life. The economic attractiveness of this strategy was uncertain.

Methods: A descriptive costing study and cost-utility analysis was performed from the perspective of the Canadian health care system. The trial randomised 161 patients to initial treatment with mitoxantrone and prednisone (M+P) or to prednisone alone (P), and showed better palliation with mitoxantrone and prednisone. There was no significant difference in survival. Detailed retrospective chart review was undertaken of resources used from randomisation to death of 114/161 patients enrolled at the three largest centres; these included hospital admissions, outpatient visits, investigations, therapies (including all chemotherapy and radiation) and hospice care. Hospital costs were calculated using the hotel approximation method and case costing from the Ontario Case Costing Project. Cost-utility analysis was performed by transforming the EORTC QLQ-C30 global quality of life item measured every 3 weeks on trial to an estimate of utility, and extending the last known value through to death.

Results: The mean total cost until death by intention to treat analysis was: prednisone alone CDN \$29,000, mitoxantrone and prednisone CDN \$27,300; a cost saving in favour of M+P of CDN \$1,700. The largest single component of cost was hospital admission (M+P 65.8% vs. P 53%). Confidence intervals at 95% range from a saving of CDN \$9,200 for M+P to an increased cost of CDN \$5,800 for M+P. Best estimates of resource utilisation indicated that the strategy of using initial mitoxantrone and prednisone was consistently cheaper whichever time period was used to compare costs. A simple conservative estimate of the upper margin of the cost-utility ratio was obtained by applying the mean incremental utility to the upper limit of 95% CI for costs gives a value of \$22,400 per QALY. The data set comprises individual patient costs and individual patient utilities. To additionally explore how to integrate two measures of variation (cost and utility) into one confidence interval, Fieller's Theorem was used to calculate confidence intervals for the ratio of differences in observed costs and effectiveness, i.e. the incremental cost-effectiveness ratio.

Discussion: Considering cost alone, a consistent but nonsignificant trend was found for initial use of M+P to be less costly than prednisone alone. This is due to a reduction in inpatient costs. A treatment that reduces symptoms and improves quality of life has the potential to reduce costs in other areas. Incorporating utilities results in a dominant strategy in favour of mitoxantrone and prednisone.

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OP6. Costs of care in a randomised trial of early hospital discharge after surgery for breast cancer

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Background: Inpatient hospital care is the major cost determinant of surgical treatment and totals up to 60 % of total health care costs for cancers. Shortening of hospitalisation is expected to reduce health care costs. However, a shifting of care to outpatient care and home care may counteract the savings achieved by shortening hospitalisation. We designed a study to determine the effect of reduction of length of hospital stay after breast cancer surgery on the rate of care consumption in and outside the hospital and on the costs of care.

Methods: 125 patients were randomised for a short or long postoperative hospital stay after surgery for breast cancer. Data on care consumption inside and outside the hospital were collected for a period of 4 months in diaries administered by the patients, and socioeconomic status was evaluated by questionnaires. Complications were also recorded. A cost-