

Abstracts

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which exclusion or inclusion of cost data beyond trial has on estimates of incremental costs: £2,640 and -£7,130 respectively. The impact on the CEAC is shown to be profound e.g. for a critical ICER of £500, the probability that the treatment is cost-effective is increased by 0.732 if beyond-trial costs are included.

CONCLUSIONS: Producers and consumers of cost-effectiveness evidence need to be aware of the potential problem of asymmetry observed in our study since these results may have significant consequences on decision-making. Economic theory would suggest that the beyond-trial components should be excluded from our base case analysis since they will have had no bearing on the observed number of STPs.

PM16

ESTIMATING AND COMPARING RESOURCE USE AND COST OF G-CSF USE IN CHEMOTHERAPY WITH THE ACTIVITY-BASED COSTING (ABC) METHOD IN THREE SETTINGS

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OBJECTIVES: to develop a standard methodology which describes, inventories and compares the activities associated with the management of neutropenia with G-CSF in chemo-treated cancer patients in three different settings: inpatient care, outpatient care and home care; to collect cost information associated with these activities for calculating a cost per administration of G-CSF from the hospital and home-care perspectives.

METHODS: The case study was conducted in Belgium where the three different settings are permanently active. Structured interviews of key personnel working in each setting were taken first to obtain a detailed overview of the activities, the frequencies, the resources used and related links to other departments involved when G-CSF is administered. Activities that had a high frequency of performance (at least weekly) were then selected. Time measurements of these frequent tasks, each with a fixed start- and end-point, were then determined. Unit costs for each resource used and labor costs were obtained from the administrative units.

RESULTS: Detailed activities in G-CSF management were identified and a "map" for the product use in each setting was established. Time measurements provided the basic information for labor costing. Belgian estimates for the cost per G-CSF administration, excluding the drug cost, was estimated at 7.4 Euro for inpatient care, 4.4 Euro for outpatient care and 4.2 Euro for the home-care setting. The main cost driver was found to be the cost of taking and analyzing blood samples in the inpatient setting where the cost of monitoring neutropenia is high compared to the other settings. Excluding these costs may favor the cost of hospital administration of G-CSF.

CONCLUSION: The methodology developed using the ABC-method of investigation helps to compare the same activities performed in administering G-CSF in different settings. It clearly identifies where potential improvements are possible so as to ensure efficient management of G-CSF administration.

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PROBABILISTIC SENSITIVITY ANALYSIS FOR EVALUATING COST-UTILITY OF ENTACAPONE TREATMENT FOR PARKINSON'S DISEASE

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OBJECTIVES: To assess uncertainty in a cost-utility analysis (CUA) of adjunct entacapone treatment with levodopa among patients with Parkinson's disease (PD). The purpose of the study was to apply probabilistic sensitivity analysis in the comparison of alternative treatment strategies using second-order simulation methods.

METHODS: Two treatment alternatives of PD, i.e. levodopa with or without entacapone, were compared in a cost-utility analysis. A Markov model was constructed based on data from phase III clinical trials of entacapone and a naturalistic health economic study of PD. Second order simulation and bootstrap methods were employed to provide understanding of the uncertainty due to sampling variation. Cost and utility parameters were drawn from empirical distributions. Parametric distributions were used in the generation of transition probabilities.

RESULTS: Using a bootstrap sample size of 200 and 1000 patients, joint distribution of the mean incremental costs and mean incremental utilities were calculated and displayed in the cost-utility plane. The results for a bootstrap sample of 1000 patients were all clustered in the quadrant IV that includes situations in which entacapone treatment yields gain in QALYs and cost savings. However, there was more variation with the sample of 200 patients. 85.4% of the bootstrap replications were in quadrant IV. 12.1% of the joint distribution fell into quadrant III indicating cost savings at the expense of loss in QALYs. Gain in QALYs at extra costs resulted in 2.1% of the observations. Only 0.4% of the simulated results indicated less QALYs and increased costs.

CONCLUSIONS: The simulation methods used provided valuable information on the sensitivity of the results of the CUA. The probabilistic sensitivity analysis used in this study strengthened confidence in the conclusions that entacapone as an adjunctive treatment to levodopa is both cost saving and increases the quality of life of PD patients.

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DO HEALTH CARE PURCHASERS PREFER PAYING FOR LIFE EXTENSION OR QUALITY OF LIFE IMPROVEMENT?

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