PCV44

COST-EFFECTIVENESS ANALYSIS OF THE USE OF VISIPAQUE COMPARED TO OMNIPAQUE IN THE UNITED KINGDOM (UK)

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OBJECTIVES: Contrast-induced adverse drug reactions (ADRs), including contrast-induced nephropathy (renal insufficiency and diabetes), are common among high-risk patients (e.g., patients with diabetes mellitus and renal impairment). These ADRs cause extended hospital stays and additional medication use which lead to increased costs. We examine the cost-effectiveness of the use of 2 contrast media in patients at high risk for contrast-induced nephropathy. **METHODS:** A decision-analytic model was constructed to estimate the cost-effectiveness of an isosmolar contrast agent, iodixanol, compared to a low-osmolar contrast medium, iohexol, in the UK. Particular emphasis of the model was to avert the incidence of severe ADRs in patients at risk of contrast-induced nephropathy. The analysis is based on a European multi-centre randomised controlled trial, the NEPHRIC trial, of patients receiving iodixanol versus ohexol in which a statistically significant reduction in the incidence of severe ADRs in favour of iodixanol occurred. Patients in the study were adults 18 years of age or older referred for coronary or aortofemoral angiography, had diabetes and stable serum creatinine concentrations (men: 1.5 to 3.5 mg/dL; women: 1.3 to 3.5 mg/dL). ADRs considered included acute renal failure, arrhythmia, cardiovascular events, pulmonary edema, and multiple-organ failure. Resource use, including hospital days, medical visits, contrast medium, medications, laboratory tests and hospital procedures, were obtained from the NEPHRIC clinical trial. Unit costs data were obtained from standard UK costing sources. Costs are reported in 2006 £s. **RESULTS:** Iodixanol is cost-effective compared to iohexol with both lower costs and better effects related to fewer ADRs. The mean per patient cost difference was ≤555.98 (≤0.41 and ≤556.39for iodixanol and iohexol, respectively). **CONCLUSION:** Iodixanol results in fewer ADRs and lower ADR costs per patient for this high risk patient population.

PCV45

COST-UTILITY ANALYSIS OF RIMONABANT IN THE MANAGEMENT OF OBESITY/OVERWEIGHT PATIENTS WITH CARDIOMETABOLIC RISK FACTORS IN HUNGARY

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OBJECTIVES: Cardiovascular (CV) risk and diseases represent significant public health problem in Hungary. Rimonabant is the first in a new class of drugs called CB1-receptor-antagonists that improves multiple cardiometabolic risk factors such as waist circumference, HbA1c, HDL and TG in overweight/obese patients. The objective of our study is to assess the cost-effectiveness of rimonabant in the management of obese, or overweight patients with cardiometabolic risk factors, such as type 2 diabetes or dyslipidemia, in Hungary. **METHODS:** A Markov model was developed to assess the cost-effectiveness of rimonabant. Clinical outcomes were derived from RIO-Diabetes study and published equations were used to calculate the cardiovascular risks associated with obesity, and to determine the development of diabetes. Utilities applied in the model were primarily derived from the HODaR database. Hungarian direct costs at 2005 price level were calculated from database and questionnaires, using patient level resource use and cost data. The analysis was performed from the payer's perspective. The costs and outcomes were discounted at 5%/year. Deterministic and probabilistic sensitivity analyses were performed. **RESULTS:** Adding rimonabant to diet and exercise for 1 year is estimated to gain 56 QALYs for 1000 patients over lifetime. The savings resulting from CV events avoided could partly offset the cost of rimonabant, resulting incremental cost of €688 (169,132 HUF) per patient. One QALY costs €12,226 (3,004,735 HUF). Cost/QALY ratio after using RIO-Lipids in sensitivity analysis still remained acceptable in Hungary. **CONCLUSION:** Rimonabant, added to diet and exercise, can represent a cost-effective therapy compared to diet and exercise alone in the treatment of obese, or overweight patients with associated risk factor(s), such as type 2 diabetes or dyslipidaemia in Hungary.

PCV46

ECONOMIC EVALUATION OF 80 MG ATORVASTATIN COMPARED TO 20–40 MG SIMVASTATIN IN PATIENTS WITH ACUTE CORONARY SYNDROMES

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OBJECTIVES: Although the primary endpoint in the IDEAL study did not fully reach significance, the study showed that treatment with 80 mg atorvastatin daily led to a significant reduction in non-fatal myocardial infarction (MI) and revascularizations compared to 20–40 mg simvastatin. A separate analysis of patients with acute coronary syndromes showed a relative reduction of the risk of MI of 46%. Here we investigate the economic impact of this in Sweden. **METHODS:** A Markov model was constructed deriving transition probabilities from the intention-to-treat patient-level data in IDEAL. The model incorporated states for MI and revascularizations. Patients are treated for the duration of the trial (5 years), and followed for the remainder of their lives. Resource consumption associated with events was estimated based on the trial data. Analyses were conducted from a societal perspective with costs expressed in year 2007€. Effectiveness was measured as quality adjusted life years (QALY) gained. Costs and effects were discounted at 3% per annum. Uncertainty was assessed through one-way sensitivity analysis and 2nd order Monte Carlo analysis where all parameter inputs were drawn from their underlying distributions. **RESULTS:** The predicted quality-adjusted survival of 10.65 years in the atorvastatin arm compared to 10.52 years in the simvastatin arm, an increase of 0.13 QALYs. Total life-time costs in the atorvastatin arm were 9387€ compared to 8888€, a difference of 499€. The cost to gain one QALY was 2361€. The results were robust to variation in model input parameters. **CONCLUSION:** Compared to the benchmarks used by the Swedish National Board of Health and Welfare in their prioritization guidelines in cardiovascular care, high dose atorvastatin would be cost-effective in the studied indication. As the present analysis represents a subgroup analysis of the IDEAL study the results should be interpreted with caution.