Abstracts

PCV53
A PHARMACOECONOMIC ANALYSIS OF PROPHYLAXIS THERAPIES AND TREATMENT OF VENOUS THROMBOEMBOLISM (VTE) IN MEXICAN PATIENTS WITH CANCER
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OBJECTIVES: Cancer recurrence is a factor that increases the risk of venous thromboembolism (VTE) among cancer patients. In this study, we assessed the cost-effectiveness of different prophylaxis strategies among patients with cancer.
METHODS: The aim of the study was to compare different prophylaxis strategies to prevent VTE among cancer patients.
RESULTS: The main results of the study showed that the cost-effectiveness of prophylaxis was lower for the anticoagulant strategies compared to other strategies. The cost was lower with the anticoagulant strategies, but the effectiveness was higher.
CONCLUSIONS: The anticoagulant strategies were the most cost-effective options for the prevention of VTE among cancer patients. The study suggests that anticoagulant prophylaxis should be considered as the first-line strategy for the prevention of VTE in cancer patients.

PCV54
COST-EFFECTIVENESS OF DABIGATRAN ETEXILATE 150 MG FOR THE PREVENTION OF VENOUS THROMBOEMBOLISM IN PATIENTS AGED OVER 75 YEARS UNDERGOING TOTAL HIP OR KNEE ARTHROPLASTY
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OBJECTIVES: Dabigatran etexilate (DBG) is a new direct thrombin inhibitor which is administered orally as a fixed dose. This analysis investigates the cost-effectiveness of dabigatran etexilate as a prophylaxis intervention in patients aged over 75 undergoing total hip or knee arthroplasty.
METHODS: The analysis was based on a Markov model with 3 health states (No VTE, Only VTE, Both VTE and bleeding events). Costs and effectiveness were modelled over five years.
RESULTS: The cost-effectiveness of dabigatran etexilate was assessed against standard doses of warfarin and rivaroxaban.
CONCLUSIONS: Dabigatran etexilate was the most cost-effective strategy for the prevention of VTE in patients aged over 75 undergoing total hip or knee arthroplasty.

PCV55
COST-EFFECTIVENESS OF VALSARTAN IN JAPAN: RESULTS FROM THE JIKEI HEART STUDY
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OBJECTIVES: The Jikei Heart Study (n = 3801) demonstrated that the angiotensin II receptor blocker (ARB) valsartan significantly reduced the incidence of the primary composite endpoint in Japanese patients previously receiving standard non-ARB therapy. The primary end point was a composite of CV morbidity/mortality including stroke or transient ischemic attack, hospitalization for heart failure or angina, dissecting aneurysm of the aorta, lower-limb arterial obstruction, doubling of serum creatinine, and transition to dialysis. The purpose of this study was to determine whether valsartan is cost-effective based on data from the Jikei Heart Study
METHODS: A probabilistic model assessed the cost-effectiveness of valsartan vs. standard therapy in a Japanese patient population. Cost-effectiveness analyses incorporated lifetime gains and quality-adjusted-life-years gained to adjust for impairment of quality-of-life. A conservative “cost-accounting” of the Jikei Heart Study was employed to validate model results—direct medical costs associated with in- and outpatient treatment of patients. A probabilistic sensitivity analysis assessed the robustness of the results.
RESULTS: Expected total costs for the non-ARB arm were ¥365,961 per patient for three years compared to ¥365,151 per patient for three years for valsartan. Cost savings of ¥270 per patient per year. Valsartan would also extend quality adjusted life years (QALY) by 0.09 over non-ARB treatment in the 3-year time horizon. The cost savings and increased QALY’s lead to a ¥485,215 per QALY gained, a dominant strategy. Probabilistic sensitivity analyses demonstrated robustness of the economic evaluation.
CONCLUSIONS: Valsartan is cost-effective in Japanese patients with high blood pressure, coronary heart disease and/or heart failure, who previously received standard care. Including costs associated with National Health Insurance sickness allowance for extended disability, valsartan is both more effective and less costly than non-ARB treatment.

PCV56
COST-EFFECTIVENESS OF DABIGATRAN ETEXILATE 150 MG FOR THE PREVENTION OF VENOUS THROMBOEMBOLISM IN PATIENTS UNDERGOING TOTAL HIP OR KNEE ARTHROPLASTY THAT HAVE MODERATE IMPAIRMENT OF RECURRENT RENAL FUNCTION
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OBJECTIVES: Dabigatran etexilate (DBG) is a new direct thrombin inhibitor which is administered orally as a fixed dose. Patients with renal impairment are thought to be at higher risk of bleeding during thromboprophylaxis, and lower doses are recommended in this population. EMEA has approved DBG at a standard dose of 220 mg twice daily (od), and at a lower dose of 150 mg od for patients with moderate renal impairment.
Recent economic analyses for the UK have demonstrated that DBG 220 mg od is cost-saving when compared with the commonly used agent, enoxaparin 40 mg od, with comparable efficacy and safety. This analysis investigates the cost-effectiveness of DBG 150 mg od for the prevention of venous thromboembolism (VTE) in patients with moderate renal impairment undergoing total hip arthroplasty (THA) or total knee arthroplasty (TKA) from the perspective of the UK National Health Service.
METHODS: DBG 150 mg od was compared to enoxaparin 40 mg od using a decision model. Relative risks for VTE and bleed events specific to patients with moderate renal impairment (creatinine clearance 30 to <50 mL/min) were derived from sub-group analyses of the phase III DBG trials, RE-MODEL and RE-NOVATE. Probabilities of recurrent VTE and post-thrombotic syndrome were estimated from published longitudinal studies. RESULTS: DBG was less costly than enoxaparin in THA and substantially less so in TKA, mainly due to differences in administration costs. VTE and bleeding rates were similar for DBG and enoxaparin; the probability of cost-effectiveness was 89% in TKA and 99% in THA at a willingness-to-pay threshold of £20,000 per quality-adjusted life-year. These results were robust across a range of sensitivity analyses. CONCLUSIONS: Thromboprophylaxis with DBG 150 mg od in patients with moderate renal impairment is cost saving compared to enoxaparin 40 mg od, with comparable efficacy and safety.

PCV57
HEALTH ECONOMIC EVALUATION OF CONTRAST MEDIA IN CORONAROGRAPHY: ISO-OSMOLAR IODIXANOL VS. LOW-OSMOLAR MEDIA
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OBJECTIVES: To perform health economic evaluation of iso-osmolar Iodixanol vs. low-osmolar contrast media in patients undergoing coronaryography.
METHODS: The decision tree modeling was performed using literature data on dosage, efficacy and safety. Iodixanol as one of the commonly used low-osmolar contrast in Russia was chosen for comparison. Efficacy of Iodixanol and Iopromide was equal, so safety issues were taken into consideration. Costs of procedure including side effects management were calculated using experts interview in Moscow clinics and hospital cost estimates. Cost-minimization analysis (CMA) from health care system perspective was performed. RESULTS: According to McCullough PA et al. (2006) the rate of contrast-induced nephropathy (CIN) was 1.4% for Iodixanol and 3.5% for Iopromide in common population, 2.8% and 8.4% in patients with chronic kidney disease (CKD), and 3.5% and 15.1% in patients with diabetes mellitus combined with CKD. Rialdl CS et al. (2010) showed that CIN patients required hospitalization 7-8 times. They demonstrated 22% mortality compared to 1.4% of patients with normal renal function. Hypotension rate was 20.1% and 9.1%, acute heart failure was 11.4% and 3.1%, cardiac arrest was 11.4% and 1.5%, respiratory distress-syndrome was 9.4% and 0.7%, and myocardial infarction was 3.9% and 0.9% respectively.