PLACEBO IN ACUTELY ILL PATIENTS

OBJECTIVES: Among the available cardiac imaging strategies as follows: CT angiography (in the presence of high likelihood or prevalence of CAD) versus stress ECHO and MRI (no comparison was found against SPECT). Under base-case (average) situations, stress ECHO was reported to be relatively cost-effective, especially in contrast with SPECT and MRI, but not CT angiography. SPECT follows with few positive cost-effectiveness results, and MRI did not achieve any cost-effectiveness over the other remaining strategies. CONCLUSIONS: Therefore, according to the published economic data from the literature, a cost-effectiveness ranking is proposed for the four analyzed comparators used in the assessment were sildenafil (60 mg/day) and bosentan (125 mg/day—depending on the patient’s body mass, once daily). The time horizon of treatment with enoxaparin (1 mg/kg body mass, twice daily) versus fondaparinux is 3 months (time horizon is 2009 WAC pricing for 5000 IU once daily for 14 days, while the cost of placebo is zero. RESULTS: In PREVENT, 2991 patients were randomized (1518 to dalteparin, 1473 to placebo). Dalteparin patients experienced 32.2% fewer VTE events while placebo had 64. Consequently, the total cost of an in-hospital VTE in the short term with a cost savings of $156,197 for patients utilizing dalteparin. The total annual costs for treating 32 VTE patients plus cost of dalteparin was $1,783,425 as compared to $2,329,132 for treating 64 VTE patients on placebo, giving an annual cost savings of $545,708 for utilizing dalteparin. CONCLUSIONS: Thromboprophylactic treatment with dalteparin reduces short term costs by $156,197 ($102.89 per person) and long term annual costs by $545,708 ($359.49 per person) in acutely ill patients at risk for VTE.

PCV79
COST-EFFECTIVENESS OF DALTEPARIN IN THE MANAGEMENT OF UNSTABLE ANGINA/ NON-STEMI EVENTS IN ACUTELY ILL PATIENTS IN MEXICO

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OBJECTIVES: Updated clinical practice guidelines recommend antithrombotic agents to minimize complications and deaths following UA/NSTEMI events. The purpose of this study was to estimate the cost-effectiveness of different antithrombotic agents in the management of UA/NSTEMI, from the institutional perspective. METHODS: A seven-stage Markov model was performed to estimate health and economic consequences during a time horizon of five weeks (one-week cycles). Effectiveness measures were reduction in incidence of acute myocardial infarct (AMI) and recurrence of angina, as well as avoided events of myocardial revascularization and deaths associated to acute coronary syndrome. Transition probabilities were obtained from a meta-analysis employing international published literature. Doses of comparators were: dalteparin (240 IU/kg/day); enoxaparin (2 mg/kg/day); fondaparinux(5 mg/day); nadroparin (75 IU/kg/day) and unfractionated heparin(15,000 IU/day). Resource use was obtained from the Social Security Mexican Institute hospital records (n = 5000). Costs were extracted from government and institutional sources and include hospitalization, drugs, medical procedures, imagiography, laboratory tests and adverse events management. Probabilistic sensitivity analyses were performed employing bootstrapping techniques. Acceptability curves were constructed. RESULTS: Dalteparin, enoxaparin, fondaparinux, nadoparin and UHF (reference alternative) associated cost per patient were: US$2501 (+19%), US$2531 (+20%), US$2226 (+6%), US$2256 (+21%) and US$2179, respectively. Dalteparin is the only alternative that is less than US$2000 than reference in all considered effectiveness measures (p < 0.05 in AMI and myocardial revascularization). Incremental cost-effectiveness ratios (ICER [CI95%]) for dalteparin compared to UHF were US$10,916 (US$10,703-US$11,128) and US$3,509 (US$3,440-US$3,577), respectively. At a willingness to pay of US$15,800 per additional AMI avoided, acceptability curves showed that the probability that dalteparin be cost-effective is close to one, while for enoxaparin is negligible. CONCLUSIONS: Regarding AMI reduction and avoided myocardial revascularization, dalteparin represents a cost-effective antithrombotic therapy in Mexican patients who suffered UA/NSTEMI due its higher efficacy and reasonable incremental costs.

PCV80
ECONOMIC ANALYSIS OF ENOXAPARIN IN COMPARISON WITH FONDAPARINUX IN THE TREATMENT OF DEEP-VEIN THROMBOSIS (DVT)

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OBJECTIVES: The purpose was to conduct a cost-effectiveness analysis (CEA) of enoxaparin versus fondaparinux in the treatment of deep-vein thrombosis (DVT) in Poland. METHODS: Data concerning efficacy and safety of compared therapies were taken from the clinical-effectiveness analysis which was based on the systematic literature review. Due to lack of statistically significant differences in comparison of enoxaparin versus fondaparinux, economic profitability estimation was performed as a cost-minimization analysis. Decision model was created by using MS Excel. Total costs of analysed therapies were estimated from the perspective of both payers in Poland (National Health Fund and patient). The minimisation analysis involved comparison of treatment with enoxaparin (1 mg/kg body mass, twice daily) versus fondaparinux (5, 7, or 10 mg—depending on the patient’s body mass, once daily). The time horizon of the analysis manage PAH (consistent with clinical trials). It was assumed that efficiency of interventions in that period of observation was constant. The costs were not discounted. The stability of obtained results was checked in one-way and two-way sensitivity analysis through change of key parameters and assumptions of the model. RESULTS: The costs of one patient using enoxaparin in the 3 month time horizon is 312.50 PLN cheaper than fondaparinux therapy. Clinical effects of assessed treatment strategies are comparable, based on the data from randomised clinical trials. One-way and two-way sensitivity analysis proved that therapy with enoxaparin is a less costly than with fondaparinux in the treatment of deep-vein thrombosis for most parameters taken into account in the sensitivity analysis. CONCLUSIONS: Treatment of deep-vein thrombosis using enoxaparin is a less expensive option in comparison with fondaparinux from both payers’ perspective (National Health Fund and patient) in Poland.