ECONOMIC EVALUATION OF EZETIMIBE COMBINED WITH SIMVASTATIN FOR TREATMENT OF PRIMARY HYPERCHOLESTEROLAEMIA

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OBJECTIVES: To conduct a cost-effectiveness analysis (CEA) comparing 35 days of prophylaxis (extended enoxaparin) with short-term prophylaxis (12 days enoxaparin) for thromboprophylaxis of venous thromboembolism (VTE) in patients undergoing elective total hip replacement (THR) surgery at high risk for VTE, for a lifetime horizon from a Canadian payer perspective. METHODS: A Markov model was developed to estimate incremental cost per life year gained and quality-adjusted life year (QALY) gained. Clinical outcomes considered in the model included symptomatic deep-vein thrombosis (DVT), pulmonary embolism (PE), post-thrombotic syndrome (PTS), and major bleeding associated with thromboprophylaxis. Treatment-specific event rates for DVT, PE, and major bleeding were derived as pooled estimates from 3 pivotal clinical trials of extended enoxaparin versus short-term enoxaparin. Ontario resource utilisation and unit costs derived from the literature were applied to trial-based drug treatment and events to estimate the costs of drug acquisition and administration, and diagnosing and managing DVT, PE, PTS and major bleeding. Utility weights used in the calculation of QALYs were also derived from the literature. RESULTS: Compared with short-term enoxaparin extended prophylaxis enoxaparin resulted in 39.6 fewer VTE events per 1,000 patients and a gain of approximately 0.01 life years and QALYs per patient. Total costs were higher for extended enoxaparin, resulting in an incremental cost of CAD$22,675 per life year gained and CAD$2,354 per QALY gained (discounted at 5% per year). The results were most sensitive to assumptions regarding the percentage of patients requiring home nursing to administer enoxaparin. CONCLUSIONS: In patients undergoing elective THR surgery, extended thromboprophylaxis with enoxaparin reduces the risk of VTE and provides favourable cost-effectiveness ratios compared with short-term thromboprophylaxis only with enoxaparin. The analysis demonstrates that extended thromboprophylaxis with enoxaparin in patients undergoing THR surgery represents a cost-effective use of resources.