prophylaxis with fondaparinux is cost-effective was addressed in this study. METHODS: A decision analytic model was developed to compare a four-week fondaparinux regimen with a one-week regimen. Clinical input parameters were derived from clinical trials and other published sources. Cost data for Swiss university hospitals were obtained from the single service tariffs database (Tarmed), the Swiss Drugs Compendium and the diagnosis related groups database (AP-DRG) and were expressed in 2004 Swiss francs (CHF). The model simulates a cohort of HFS and THR patients over 30 days and 5 years. Outcomes were measured in life-years gained (LYG). Future costs and outcomes were discounted with an annual rate of four percent. RESULTS: In a hypothetical cohort of 1000 HFS patients, extended prophylaxis avoids 10 fatal events and 9 VTEs over a time horizon of 30 days. The corresponding ICER is CHF 2801 per LYG. With a lower baseline risk for VTE in THR patients, extended fondaparinux prophylaxis prevents one fatal event in 1000 patients over a time horizon of 30 days, yielding an ICER of CHF 2,394 per LYG. After five years, extended prophylaxis is cost-saving in both HFS and THR patients. The model results were robust to variations of major clinical and cost parameters. CONCLUSIONS: Extended prophylaxis with fondaparinux in THR and HFS patients is cost-effective from a Swiss health-care perspective using a time horizon of 30 days. With a longer time horizon of five years, extended prophylaxis with fondaparinux is cost-saving.

COST EFFECTIVENESS OF FONDAPARINUX COMPARED WITH ENOXAPARIN FOR EXTENDED PROPHYLAXIS AGAINST VENOUS THROMBOEMBOLISM IN PATIENTS UNDERGOING HIP FRACTURE SURGERY USING DUTCH ESTIMATES OF COSTS

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OBJECTIVE: To determine the cost-effectiveness of fondaparinux compared with enoxaparin for extended prophylaxis against venous thromboembolism in patients undergoing hip fracture surgery using Dutch estimates of costs. METHODS: Costs and effects are modeled using a cohort simulation model. Short term transition probabilities (until day 30) are based from placebo controlled trials. Long term probabilities are obtained from the literature. Resource use and costs were estimated in a separate costing study concerning bleedings and symptomatic events. Outcome measures were rates of symptomatic thromboembolic events, deaths avoided and health care costs. Costs were estimated at CHF 2,212 in the UK and at CHF 6,66 in The Netherlands. The number of deaths avoided (per 10,000 patients) was estimated at 138 (89–192). Costs per symptomatic VTE avoided were estimated at CHF 4,788 (€3,528–€6,906) in the UK and at CHF 1,915 (€392–€4021) in The Netherlands. Costs per death avoided were estimated at CHF 11,932 (€7220–€20,480) and CHF 4,773 (€892–€1,629). When assuming the average survival after surgery at 6 years, costs per life year gained are estimated at under CHF 3,000 for the UK and at under CHF 900 for The Netherlands. CONCLUSION: Our estimates indicate that extending the prophylaxis with fondaparinux from 7 to 21 days has an acceptable balance between cost and outcomes both in the UK and The Netherlands.