(US$20,888). **RESULTS:** The total cost of six-months treatment with rivaroxaban was US$89 and US$96* higher than warfarin. Increased drug cost (US$356) associated with rivaroxaban, was offset by reduced monitoring costs (US$239). Moreover, rivaroxaban was associated with LY increments of 0.006 and 0.026* years and QALY increments of 0.005 and 0.022* years. The ICERs were US$16,227 and US$3,488* per LY gained and US$17,928 and US$4,056* per QALY gained. Sensitivity analysis showed that ICER value was sensitive only to the frequency of monitoring (between two to six-times a year) in warfarin patients. **CONCLUSIONS:** Rivaoxaban is cost-effective in the Turkish setting for the acute treatment of DVT patients, with ICERs below accepted WTP threshold across a range of conservative scenarios. ** all pairs of figures correspond to 5-years and life-time horizon, respectively.*

PCV91

A MODEL FRAMEWORK EVALUATING FACTORS AFFECTING THE VALUE OF TREATMENT ONE YEAR FOLLOWING AN ACUTE CORONARY SYNDROME EVENT

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OBJECTIVES: To build a flexible pharmacoeconomic model for early-stage analysis of interventions to prevent major adverse cardiovascular events (MACE=non fatal myocardial infarction (MI) and stroke, and cardiovascular death). **METHODS:** A literature search of cost-effectiveness models of cardiovascular disease interventions was conducted. Two models, one for heart disease and one for stroke, were selected as the framework (e.g., health states and transitions) for the development of an acute coronary syndrome (ACS) microsimulation model. Major parameter inputs were extracted from published literature. UK-based exploratory analyses using health state costs from the National Health System (NHS) reference costs and drug costs from the NHS October 2012 Electronic Drug Tariff, varied first-year risk of subsequent MACE events from 8-12%; and treatment efficacy (defined as a relative risk reduction (RRR)) from 15-25%. The base case treatment comparator was defined as standard of care (SoC) consistent with guidelines on secondary prevention of MI, including antihypertensive medications, aspirin, a statin, and one year of clopidogrel after each ACS event. New treatments can be added to, or substituted in the SoC. Age, gender, and patient history were varied for 10,000 individual patients simulated over specified timeframes. **RESULTS:** The model estimates a range of 15 to 39 MACE avoided per thousand patients in one year for a 15% RRR with an 8% background MACE rate versus a 25% RRR with a 12% background MACE rate, respectively. Assuming a £20,000/QALY willingness to pay in the UK, estimated lifetime incremental costs and QALYs predict the net benefit to be £1,371 for a point estimate of 20% RRR of a 10% background MACE rate. **CONCLUSIONS:** Early cost-effectiveness analyses using feasible RRRs in typical background MACE rates seen in ACS populations can be cost effective. Validation of this model framework can lead to more robust conclusions.

PCV92

CLINICAL AND ECONOMIC CONSEQUENCES OF USING FONDAPARINUX OR ENOXAPARIN FOR THE PREVENTION OF VENOUS THROMBOEMBOLISM IN HIP SURGERY IN BRAZIL

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OBJECTIVES: Venous thromboembolism (VTE) causes significant impact on morbidity/mortality and economic burden to health systems. For preventing VTE in hip fracture/arthroplasty, the American College of Chest Physicians Practice Guidelines recommends the use of antithrombotic agents, such as fondaparinux and low-molecular weight heparin (LMWH). We present a cost-effectiveness analysis of fondaparinux versus enoxaparin for the prevention of VTE in hip surgery in Brazil. **METHODS:** A decision model was developed with a 180-day post-surgery horizon for the comparison of fondaparinux versus enoxaparin, both administered during hospitalization (average eight days) for the prophylaxis of VTE in hip surgery. Thromboembolic event and major bleeding probabilities were derived from three major published randomized clinical trials comparing fondaparinux and enoxaparin (N>6,000). Costs were calculated using microcosting technique in search for hip surgery and thrombotic/hemorrhagic complications reimbursed from the public Brazilian Unified Health System Database (DATASUS) in June 2012. Drug prices for antithrombotic prophylaxis were extracted from the Health Prices Database (BPS) in 2012 (1BRZ=0.52USD). **RESULTS:** VTE was observed in 5.9% versus 11.5% of patients with fondaparinux and enoxaparin, respectively (relative risk reduction=48.8%). Major bleeding (leading to death, reoperation or in critical sites) were similar in both groups, although bleeding with index >2 were more frequent in fondaparinux (2.4% versus 1.7%). Cost-effectiveness data showed fondaparinux was dominant over enoxaparin (i.e., reduced mortality at lower costs). There was an increment of three deaths per 1,000 patients by using enoxaparin instead of fondaparinux. Fondaparinux reported cost savings of BRZ16.53 per patient treated. Influence analysis showed that the incremental deaths and costs of enoxaparin were largely related to the higher incidence of thrombotic complications. **CONCLUSIONS:** Fondaparinux was found to be a cost-effective option under the Brazilian Public Health System perspective for the prophylaxis of VTE, resulting in lower mortality incidence at a reduced budget impact.

PCV93

SYSTEMATIC REVIEW OF COST-EFFECTIVENESS ANALYSES OF DABIGATRAN VERSUS WARFARIN FOR ATRIAL FIBRILLATION ACROSS DIFFERENT HEALTH CARE SYSTEMS

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OBJECTIVES: In the management of atrial fibrillation (AF), warfarin has been the anticoagulant of choice for preventing thrombotic complications, however, its need for regular blood test monitoring has led to the development of alternatives such as dabigatran. In order to address the variability and uncertainties in cost-effectiveness and budget impact across jurisdictions, a systematic review of economic analyses was conducted. **METHODS:** A systematic review was conducted of economic evaluations published to November 2011 evaluating the cost-effectiveness of dabigatran versus warfarin for stroke prevention in AF. Databases searched included Ovid MEDLINE, EMBASE, the Cochrane Library and PubMed. The grey literature was also searched for relevant articles. For the purpose of a qualitative synthesis, details on the study design, data sources, cost effectiveness results (i.e. incremental cost effectiveness ratios (ICER)) were abstracted. Key factors influencing the cost-effectiveness of dabigatran compared with warfarin across different countries and health systems were identified. **RESULTS:** Seven economic evaluations comparing dabigatran and warfarin from four countries were identified. Costs, QALYs and ICERS were reported in all but one study. ICERs for dabigatran compared to warfarin ranged from £4,879.17 to $152,142.86 US, depending on the dabigatran dose and currency. Variations in ICERs occurred despite the fact that the efficacy and hemorrhage data were obtained from the same source, the RE-LY trial. Key factors identified between the models for variability in the results included differences in the costs of managing AF across countries; assumptions regarding warfarin monitoring frequency and costs, and INR control (trial-like or real-world setting); incorporation of baseline risk in relative rates of adverse events; and the costs of treating dabigatran-related hemorrhages without an antidote. **CONCLUSIONS:** Economic analyses for dabigatran versus warfarin have produced widely varying results. Real world effectiveness and safety data, including warfarin management practices, are useful to inform cost-effectiveness in practice.

PCV94

ECONOMIC EVALUATION OF APIXABAN FOR VENOUS THROMBOEMBOLISM IN TOTAL KNEE AND TOTAL HIP REPLACEMENT IN GUATEMALA

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OBJECTIVES: . Due to the aging of the population, musculoskeletal diseases, particularly articular diseases and fragility fractures, have been constantly increasing. For this reason, total hip replacement (THR) and total knee replacement (TKR) have also increased. These procedures impact the quality of life and imply high risk of venous thromboembolism (VeT). VeT events have a high mortality in the elderly, 21% on hospitalized patients and up to 39% one year after the surgery. Prophylaxis for VeT is as a major strategy to minimize the consequences on patients undergoing TKR and THR. The aim of this study was to assess the cost-effectiveness (CE) of apixaban against dabigatran, rivaroxaban, fondaparinux, and enoxaparin for VeT prevention on these patients in Guatemala, from the private health care perspective. **METHODS:** . A simulated cohort of 1,000 patients subjected to THR/TKR entered a decision-tree model to compare costs and effectiveness of apixaban (2.5 mg/12 hours), dabigatran (220 mg/day), rivaroxaban (10 mg/day), fondaparinux (2.5 mg/day) and enoxaparin (30 mg/12 hours). Effectiveness measures were: total VeT events, bleeding rates and deaths. The model used a 5 year time horizon and only direct medical costs were considered (inpatient costs, medication expenses, adverse events, tests). Effectiveness and epidemiologic data were retrieved from published literature. Local costs (2012 US$) were gathered from the 3 private hospitals of Guatemala official databases. **RESULTS:** . The total VeT events were 69 for Apixaban, 55 for Rivaroxaban, 112 for Dabigatran, 86 for Enoxaparin and 45 for Fondoparinux. The estimated bleeds were 71 (Apixaban), 85 (Rivaroxaban), 85 (Dabigatran), 73 (Enoxaparin) and 31 (Fondaparinux). Apixaban dominated enoxaparin and dabigatran while rivaroxaban and fondaparinux had an ICER of US$104,177/QALY and US$103,933/QALY, respectively. In the acceptability curves, Apixaban appeared with the highest probability of being cost-effective. **CONCLUSIONS:** . Apixaban resulted as the cost-effective therapy for VeT prevention for adult patients in Costa Rica.

PCV95

COST-EFFECTIVENESS OF SAPIEN® TRANSCATHETER AORTIC VALVE FOR SEVERE SYMPTOMATIC AORTIC STENOSIS IN INOPERABLE PATIENTS IN THE BRAZILIAN PUBLIC HEALTH CARE SYSTEM

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OBJECTIVES: Aortic stenosis is the most common valvular heart disease in the elderly - it is estimated that its prevalence is up to 5% in individuals over 75 years. Its standard treatment is surgical valve replacement; however the surgical risk is very high for patients with advanced age and with the association of comorbidities. Thus, a significant proportion of patients become ineligible for this therapy. Treatment with transcatheter aortic valve implantation (TAVI) is a therapy with potentially lower risk peri-procedure and has been used as a therapeutic option in this group of patients considered inoperable. The aim of this study was to develop a cost-effectiveness analysis of the SAPIEN® valve implantation in patients with severe aortic stenosis who are not eligible for surgical treatment. **METHODS:** A Markov model was developed to compare the