therapy for primary CVD prevention saves patients money and increases QALYs, but at the expense of lost life years.

PCV112  COST EFFECTIVENESS OF RIVAROXABAN AND DABIGATRAN ETIXILATE FOR THE PROPHYLAXIS OF VENOUS THROMBOEMBOLISM AND ASSOCIATED LONG TERM COMPLICATIONS POST TOTAL HIP REPLACEMENT IN IRELAND

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OBJECTIVES: To evaluate the cost-effectiveness of rivaroxaban and dabigatran compared to enoxaparin as venous- thromboembolism prophylaxis post total hip replacement (THR), from the Irish health payer perspective. METHODS: A hybrid modelcombining a acute phase decision tree (180 days post-surgery) and a chronic phase Markov model (patient lifetime) was developed using TreeAge Pro 2008®. Outcome measures were QALYs and LYGs. Future costs and outcomes were discounted at 4%. Treatment efficacy and major bleeding probabilities were derived from pivotal clinical trials. Thromboprophylaxis independent probabilities were identified via a literature search. A one-way sensitivity analysis of all probabilities was completed using the upper-bound values of the 95% confidence interval where available; otherwise point estimates were varied ± 50%. A probabilistic sensitivity analysis (PSA) using second order Monte Carlo simulation was performed. Probabilities were assigned beta distributions. Discrete distributions were adopted for multibranch nodes. Utilities and direct costs of death, 30 or 60 days after beta and lognormal distributions respectively were estimated. Basecase Analyses: Rivaroxaban dominated both dabigatran and enoxaparin. The incremental cost-effectiveness ratios for dabigatran relative to enoxaparin were €1885 per LY and €811 per QALY. One-Way Sensitivity Analysis: The model was robust to changes in the value of the beta and lognormal distributions. Results showed that a deep vein thrombosis (DVT) will occur on dabigatran, a pulmonary embolism or proximal DVT will occur on enoxaparin. PSA: At a €45,000/QALY threshold, the probability that rivaroxaban was the most cost-effective strategy was 67%, followed by dabigatran (19%) and enoxaparin (14%). A cost-effectiveness plane illustrating scatterplots for rivaroxaban versus enoxaparin and dabigatran versus enoxaparin was produced. Overlap indicates uncertainty that rivaroxaban is more cost-effective than dabigatran. CONCLUSIONS: Basecase analyses indicate that rivaroxaban is more cost-effective than enoxaparin or dabigatran. PSA indicates that rivaroxaban is the most cost-effective strategy at a €45,000/QALY threshold; however there is uncertainty regarding this strategy being more cost-effective than dabigatran.

PCV113  COST-EFFECTIVENESS OF FONDAPARINUX VS ENOXAPARIN IN EXTENDED PROPHYLAXIS OF VENOUS THROMBOEMBOLISM IN MAJOR ORTHOPEDIC SURGERY IN POLAND

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OBJECTIVES: To assess clinical effectiveness and cost-effectiveness of fondaparinux vs enoxaparin (30 mg or 30 mg twice a day) in extended prophylaxis (administration for 3 days) of venous thromboembolism in patients after major orthopedic surgery (knee arthroplasty, hip arthroplasty, hip fracture) in Poland. METHODS: Systematic review and clinical effectiveness analysis according to Polish HTA Guidelines were performed. Only RCTs with high credibility assessment were included in the systematic review (according to EBM). Costs valid from public payer’s perspective (National Health Fund) were taken into account and were based on data from 2007. Costs of pharmacotherapy were estimated with 100% reimbursement (lump sum patient payment 3.2 PLN). Both health effects and costs were discounted with five percent rate and at 4% for 30 days) of venous thromboembolism in patients after major orthopedic surgery (STEMI). In the HORIZONS randomised controlled trial, anticoagulation with bivalirudin in the HORIZONS trial. UK National Health Service valuations and per-}

PCV114  DABIGATRAN ETIXILATE IS COST-SAVING FOR THE PRIMARY PREVENTION OF VENOUS THROMBOEMBOLIC EVENTS FOLLOWING MAJOR ORTHOPAEDIC SURGERY IN THE NETHERLANDS

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OBJECTIVES: Dabigatran etexilate (DBG) is a new oral direct thrombin inhibitor for prophylaxis of venous thromboembolism (VTE) in patients who have undergone total hip replacement (THR) or total knee replacement (TKR) surgery. Advantages of DBG over parenteral prophylaxis might include but are not limited to reduced resource use for 1) reaching patients to self-inject; 2) home-care visits for parenteral administration; and 3) absence of Heparin Induced Thrombocytopenia (HIT). Based on proven non-inferiority, the aim of this study was to conduct a cost-minimization analysis of oral DBG versus parenteral low-molecular weight heparin (LMWH) and Fondaparinux formulations from the perspective of the Dutch National Health Service. METHODS: A retrospective cohort study was conducted to measure resource use associated with parenteral prophylaxis. Drug-utilization data were combined with local unit costs, and utilities were drawn from published UK sources. RESULTS: In the base case analysis, the dabigatran strategy was dominant with an average saving of £450 per patient and an average survival gain of 0.09 QALYs per patient. Cumulative costs in the dabigatran and parenteral plus GPI strategies were £12,318 and £12,769 per patient, respectively. Patients lived 0.05 and 0.59 QALYs. A dominant or highly

PCV115  TIOFIBRIN IS MORE COST-EFFICIENT THAN A'BICXIMAB IN ACHIEVING ST-SEGMENT RESOLUTION FOLLOWING ACUTE MYOCARDIAL INFARCTION

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OBJECTIVES: Glycoprotein IIb/IIIa inhibitors are high efficacy inhibitors of platelet aggregation. The Multistrategy trial showed Tirofiban or Abciximab were similarly efficacious in resolving ST-segment elevation at 90 min post intervention following Acute Myocardial Infarction. As combination therapy to inhibit platelet function and the coagulation cascade to improve cardiovascular outcome there is a focus in Acute coronary settings, the focus is turning to cost efficient approaches. We undertook a pharmaco-economic analysis of the Multistrategy study to identify the most cost-effective therapy. METHODS: Cost-minimization analysis of a randomized controlled trial, where costs are calculated only when between group statistical differences are identified. Direct medical resources (drugs, procedures, investigations, adverse effects and duration of stay) were prospectively collected within the case report form. Drug costs were average wholesale prices obtained from the manufacturer. Baseline costs and major procedural resource items were assumed to be similar; Clopidogrel (p = 0.71), Aspirin (p = 0.18), Heparin (p = 0.14); PCI; stents (p = 0.81), guidewires (p = 0.45), non serious adverse events (p = 0.41), Bleeding (p = 0.775), 9 Days in hospital (p = 0.95). Duration of Tirofiban infusion was longer for more concentrated infusions (p = 0.000). A cost-effectiveness plane illustrating scatterplots for rivaroxaban versus dabigatran and dabigatran versus enoxaparin was produced. Overlap indicates uncertainty that rivaroxaban is more cost-effective than dabigatran. CONCLUSIONS: Basecase analyses indicate that rivaroxaban is more cost-effective than enoxaparin or dabigatran. PSA indicates that rivaroxaban is the most cost-effective strategy at a €45,000/QALY threshold; however there is uncertainty regarding this strategy being more cost-effective than dabigatran.

PCV116  COST-EFFECTIVENESS OF BIVALIRUDIN VERSUS HEPARIN PLUS GYCOPLATEIN IIb/IIIa INHIBITOR IN THE TREATMENT OF ACUTE ST-SEGMENT ELEVATION MYOCARDIAL INFARCTION—A HORIZONS TRIAL ANALYSIS USING UK VALUATIONS

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OBJECTIVES: Primary percutaneous coronary intervention (PCI) has become the preferred treatment option for acute ST-segment elevation myocardial infarction (STEMI). In the HORIZONS randomised controlled trial, an association between bivalirudin versus heparin plus glycoprotein IIb/IIIa inhibitor (GPI) was associated with similar ischemic event rates and significantly reduced bleeding events. Mortality at 30 days and 1 year, in this indication. We estimated the incremental cost-effectiveness of bivalirudin in the HORIZONS trial. UK National Health Service valuations and perspective were applied. METHODS: A decision tree model compared the bivalirudin and heparin plus GPI strategies investigated in HORIZONS II. It was combined with a Markov module to achieve a life-long time horizon. The health economic endpoint was cost per quality-adjusted life-year (QALY) gained. One-year clinical event rates and medical resource use parameters were derived from the HORIZONS dataset. Remaining life expectancy and long-term cardiovascular treatment costs of first-year survivors, unit costs, and utilities were drawn from published UK sources. Costs and effects were discounted at 4% and 1.5% respectively. Resource implications of medication side-effects or treatment duration were seen. Tirofiban is the most cost-effective Glycoprotein IIb/IIIa inhibitor in achieving ST-segment resolution at 90min post intervention.

PCV117  ACHIEVING ST-SEGMENT RESOLUTION FOLLOWING ACHIEVING ACUTE MYOCARDIAL INFARCTION

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