COST-EFFECTIVENESS OF RIVAROXABAN VERSUS DABIGATRAN FOR PRIMARY PROPHYLAXIS IN TOTAL HIP REPLACEMENT SURGERY IN THE UNITED STATES

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OBJECTIVES: American College of Chest Physicians (ACCP) guideline recommends the use oral medication either rivaroxaban or dabigatran in patients who are undergoing major orthopedic surgery and decline injections. This study assessed the cost-effectiveness of rivaroxaban versus dabigatran for prevention of venous thromboembolism (VTE) and bleeding episode after total hip replacement (THR) surgery from the payer perspective within one year. The 6-month timeframe was adopted to compare the cost-effectiveness of rivaroxaban and dabigatran for THR. Treatment efficacy and safety data such as probabilities of distal and proximal deep vein thrombosis (DVT), symptomatic pulmonary embolism (PE), and major bleeding were reported. In this study, rivaroxaban and dabigatran were used for 28 days. In the rivaroxaban arm, the cost of rivaroxaban was $303 per patient per year. In the dabigatran arm, the cost of dabigatran was $393 per patient per year. The use of rivaroxaban results in lower costs and fewer DVT and PE events compared to dabigatran. The results are similar for suspected arrhythmia and unexplained syncope populations. The cost-effectiveness of rivaroxaban in preventing VTE and reducing bleeding in patients undergoing THR was found to be more cost-effective compared to dabigatran.

PCV83
THE COST-EFFECTIVENESS OF DETECTING ARRHYTHMIA WITH IMPLANTABLE LOOP RECORDERs IN THE UNITED STATES OF AMERICA

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OBJECTIVES: To evaluate the cost-effectiveness of diagnosis with an IRL following Standard Testing (ST) after a syncopal event from a United States payer perspective. METHODS: This analysis considers all costs of diagnosis via ST and IRL, the costs and consequences of recurrence syncope, and the cost of arrhythmia treatment following diagnosis. A Markov model was developed to reflect the recurrence of syncope events in unexplained syncope patients. Due to documented differences in the prevalence of arrhythmia between patients with suspected arrhythmia and patients with unexplained syncope, the model was divided into two populations separately, each with its own costs and consequences. The percentage of patients associated with higher AF recurrence in SoC was the most sensitive variable. RESULTS: The results are similar for suspected arrhythmia and unexplained syncope populations, with no significant differences. The incremental cost-effectiveness ratio (ICER) between the two populations is estimated to be between 0.2806 and 0.4289, and the incremental cost-effectiveness ratio (ICER) is between $34,400 and $52,400. The syncope events avoided with IRL are 402 per 1,000 patients in the unexplained syncope population, which includes the incremental costs and effects lower compared to the previous case. The study found that IRL increases the diagnostic yield in both populations and guides treatment in more patients compared to ST.

PCV84
COST-EFFECTIVENESS EVALUATION OF AXPABAN, DABIGATRAN RIVAROXABAN AND WARFARIN FOR PREVENTION OF TROMBOEMBOLISM IN PATIENTS WITH ATRIAL FIBRILLATION IN BRASIL

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OBJECTIVES: To evaluate the cost-effectiveness of AXPABAN, DABIGATRAN, RIVAROXABAN and WARFARIN for the prevention of TROMBOEMBOLISM in patients with ATRIAL FIBRILLATION in Brazil. METHODS: A Markov model was developed to compare the cost-effectiveness of the four medications. The incremental cost-effectiveness ratio (ICER) between rivaroxaban and dabigatran is $34,400 and $52,400. The syncope events avoided with IRL are 402 per 1,000 patients in the unexplained syncope population, which includes the incremental costs and effects lower compared to the previous case. The study found that IRL increases the diagnostic yield in both populations and guides treatment in more patients compared to ST.

PCV80
AN ECONOMIC ANALYSIS OF A HYPOTHETICAL VALUE-BASED INSURANCE DESIGN PROGRAM USING THE ARCHIMEDES MODEL

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OBJECTIVES: Value-based insurance design (VBID) programs aim to encourage patient use of high value health care services, often with the goal of reducing overall cost. We investigate a hypothetical VBID program of copy elimination for statins to determine if it is cost saving and cost effective. METHODS: The Archimedes Model was used to simulate the outcomes of increased statin adherence due to copy elimination. 10,000 individuals representative of US population who were prescribed statins were modeled over a 10 year timeframe, subjected to a two-arm virtual trial: one arm represents current care and the other arm represents copy elimination. Based on a literature review, statin adherence rates were increased by 3% in the copy elimination arm. Statin prices, based on generic prices was $45 per patient per year for SoC statins, and $3/mo for all other Simvastatin doses. RESULTS: The VBID program failed to be cost saving, costing insurers $20 per person per year over the 10 year timeframe. The program would save patients $1,250 per year in 2010 prices and increase cost by 1% in men older than 65 years and 2% in men older than 80. 0.02% of patients would stop taking their statin. This study assesses the cost effectiveness (C/R) of AXPABAN versus other anticoagulation therapies for prevention on NVAF, from the private health care perspective. METHODS: A Markov decision-tree model was developed to compare the cost-effectiveness of the four medications. The results are similar for suspected arrhythmia and unexplained syncope populations, with no significant differences. The incremental cost-effectiveness ratio (ICER) between rivaroxaban and dabigatran is $34,400 and $52,400. The syncope events avoided with IRL are 402 per 1,000 patients in the unexplained syncope population, which includes the incremental costs and effects lower compared to the previous case. The study found that IRL increases the diagnostic yield in both populations and guides treatment in more patients compared to ST.