old of £30,000. CONCLUSIONS: At a willingness-to-pay threshold of £20,000 per QALY, NOACs are cost-effective compared with warfarin. There is considerable uncertainty between the different NOACs, but apixaban (5mg bd) had the highest expected incremental net benefit and the highest probability (60%) of being most cost-effective first-line anticoagulant for the prevention of stroke in AF, primarily due to the lower rate of intracranial haemorrhage, other clinically relevant bleeding, and myocardial infarction.

PCV104 IS EDOXABAN COST-EFFECTIVE FOR NON-VALVULAR ATRIAL FIBRILLATION PATIENTS TREATED WITH VITAMIN K ANTAGONISTS IN SPAIN?

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OBJECTIVES: To compare the cost-effectiveness of edoxaban versus acenocoumarol (VKA treatment) in the prevention of stroke and systemic embolic events in patients with non-valvular atrial fibrillation (NVAF) in Spain. METHODS: A Markov model was developed and adapted to the Spanish setting to simulate the evolution of NVAF venous thromboembolism (VTE). Edoxaban is cost-effective compared with acenocoumarol from the NHS perspective in the prevention of stroke and systemic embolic events in patients with NVAF in Spain.

PCV105 COST-EFFECTIVENESS ANALYSIS OF BEMIPARIN USED AS ACUTE TREATMENT FOR DEEP VEIN THROMBOSIS WITHOUT PULMONARY EMBOLISM

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OBJECTIVES: Deep vein thrombosis (DVT) and pulmonary embolism (PE) constitute the third most cost-effective cardiovascular illness after acute coronary syndrome and stroke and a raising public health concern due to its morbity and mortality and higher costs. Acute and long term treatments help to avoid complications. We assessed the costs and effectiveness of different regimens of treatment for DVT without PE under the hypothesis of the public health system. METHODS: A seven-pathway decision tree allowed comparision of five competing strategies. Acute treatment for 7 days involved bemiparin 115USIU intramuscularly and beiparin 1,500 IU subcutaneously for 1 day (ENO-BID), 1.0 mg/Kg twice daily (ENO-BID), nadroparin 100IU/Kg twice daily (NAD) or unfractionated heparin administered as 80IU/Kg initial bolus followed by continuous infusion at a rate of 18 IU/kg/hour (UIF). Long term treatment consisted of doses of warfarin administered orally during 83 days (VKA). Direct medical costs included acquisition of medicines, care of further episodes, and managing of adverse events/complications. Resource use was based on published literature and evidence obtained from local units cost and diagnosis-related groups (DCG) costs were gathered. Effectiveness is expressed in terms of VTE-free patients and deaths avoided per 1000 treated. Deterministic and probabilistic sensitivity analyses were conducted. RESULTS: Acute treatment with BEM was the most effective-interven- tion with benefits ranging from 33 VTE-free patients and 7 deaths avoided (Vs. ENO-OAD and ENO-BID, respectively) to 64 VTE-free patients and 21 deaths avoided (Vso Vs. NAD) per 1,000 treated. BEM followed by warfarin was also the less costly regimen leading to overall cost-savings varying between MXN6,060,206 (Vs. NFIH) and MXN7,084,142 (Vs. NAD) per 1,000 treated. Model results were robust to plausible- changes in main parameters. CONCLUSIONS: Bemiparin may present a cost-saving strategy, which may be used as the use of local unit costs and other parameters, we evaluated alternative assumptions of the acquisition and administration of bemiparin given 40µg twice a day for 28 days; surgery, hospital stay, and rehabilitation after amputation; incapacity, prosthesis, and pensions in assumed current workers. We conducted the analysis for the time frame of one year using a decision tree developed in Microsoft Excel®. We gathered the effectiveness of alprostadil from a clinical trial. All costs are expressed in 2014 Mexican pesos (MXN). We performed a deterministic sensitivity analysis. RESULTS: Excluding the prosthesis costs, total direct medical costs of alprostadil were MXN 4006 (5.8%) lower than the direct medical costs expected with limb amputation (MXN 65,490 Vs. MXN 69,496). When costs due to incapacity, prosthesis, and pensions in the model are included into the analysis, the difference in favour of alprostadil reached MXN 8,864 (MXN 66,577 Vs. MXN 75,441) which is equivalent to an overall cost reduction of 11.8%. Deterministic sensitivity analysis showed the model is quite sensitive to the acquisition and intra-articular costs of alprostadil. CONCLUSIONS: The results of this analysis suggest that alprostadil may be offset by the overall savings in direct medical costs and in payments due to incapacities and pensions.

PCV109 PHARMAECONOMIC ANALYSIS OF VARIOUS TREATMENT STRATEGIES FOR PATIENTS WITH CHRONIC VENOUS INSUFFICIENCY OF THE LOWER LEGS

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OBJECTIVES: Determining pharmacoeconomic efficiency of actovegin in complex therapy of complicated chronic venous disease of lower extremities. METHODS: The model structures generally captured the important events needed to accurately estimate differences in costs and outcomes between different treatment strategies. The results were conducted within economic comparisons of 16 studies included rivaroxaban, 9 studies included dabigatran, 3 studies included apixaban, and no studies included edoxaban. The analyses that compared a NOAC with low molecular-weight heparin (LMWH) predominantly resulted in the NOACs dominating LMWH for patients with both THR and TKR. The results of analyses that compared NOACs with each other suggested that dabigatran is the least cost-effective option. There is limited evidence directly comparing rivaroxaban with apixaban, but our results suggested that rivaroxaban dominates apixaban for patients within the United Kingdom. CONCLUSIONS: Economic analyses of NOACs for primary VTE prophylaxis following THR and TKR surgeries show reasonable consistency in the model structures used and events captured. The results strongly support the cost-effectiveness of edoxaban over rivaroxaban, with the least cost-effective NOACs. However, more research is needed to assess the cost-effectiveness of apixaban and edoxaban.

PCV107 COST-EFFECTIVENESS OF FERRIC CARBOXYMALATE IN PATIENTS WITH IRON DEFICIENCY AND CHRONIC HEART FAILURE IN AUSTRIA

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OBJECTIVES: Iron deficiency (ID) is highly prevalent in chronic heart failure (CHF) patients and imposes a significant disease burden for CHF patients with numerous important consequences. The objective of this study was to evaluate the cost-effectiveness of oral iron replacement with ferumoxytol as a potential treatment for CHF patients with iron deficiency and/or anemia. METHODS: We developed a Cost-Utility-Model to simulate disease progression in CHF patients using different strategies of iron replacement. Model comparison strategy is used for disease progression, based on health states, defined by NYHA classes and death. Monte Carlo simulation accounted for uncertainty. The model includes 5 states and monthly transitions. Probabilities were derived from clinical and epidemiological studies. The cohort definition was adapted from the FAIR-HF study. Direct costs (NVIH, inpatient, outpatient and iron treatment costs) from published sources were used and expressed in 2014 Euro from the payee’s perspective. QALYs and total costs were projected over a 4-year time horizon and discounted at 5% p.a. RESULTS: Over a 4-year timeframe, costs and outcomes associated with FCW would amount to 18,797.39 € and 2.46 QALYs. Costs associated with oral treatment are 17,307.06 € and 2.57 QALYs (ICER per QALY gained €16,921.62). Costs and outcomes associated with iron replacement are 17,934.15 € and 2.46 QALYs (ICER per QALY gained €5,411.23). Due to a delayed disease progression in the FCW group, NVIYH costs are lower than with oral replacement and no-treatment. CONCLUSIONS: IV iron treatment with FCW compared with oral iron in iron deficient CHF patients is clearly below the CE threshold of €22,200.733 QALY typically used by the UK NICE and hence can be considered a cost-effective treatment strategy.

PCV108 COMPARISON OF OVERALL COSTS BETWEEN ALPROSTADIL AND LIMB AMPUTATION IN PATIENTS AFFECTED BY PERIPHERAL ARTERIAL DISEASE STAGES III AND IV IN MEXICO

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OBJECTIVES: Peripheral arterial disease entails increased mortality besides a significant economic and humanistic burden, especially in patients with critical limb ischemia (CLI, stages III and IV). Fostanoides are usually indicated to those unsuitable for interventional therapy. We aimed to assess the overall costs of alprostadil (prostegranulin B1) as treatment for CLI compared with amputation, based on the perspective of the Instituto Mexicano del Seguro Social (IMSS). METHODS: Based on published literature, information derived from an expert panel, and local official sources of unit costs and other parameters, we evaluated the cost of the acquisition and administration of alprostadil given 40µg twice a day for 28 days; surgery, hospital stay, and rehabilitation after amputation; incapacity, prosthesis, and pensions in assumed current workers. We conducted the analysis for the time frame of one year using a decision tree developed in Microsoft Excel®. We gathered the effectiveness of actovegin in complex therapy of complicated chronic venous disease of lower extremities. METHODS: Economic analyses were included, all studies used decision tree structures to model acute prophyaxis, and 13 included a chronic phase Markov module to capture long-term complications and recurrent VTE events. The model structures generally captured the important events needed to accurately estimate differences in costs and outcomes between different treatment strategies. The results were conducted within economic comparisons of 16 studies included rivaroxaban, 9 studies included dabigatran, 3 studies included apixaban, and no studies included edoxaban. The analyses that compared a NOAC with low molecular-weight heparin (LMWH) predominantly resulted in the NOACs dominating LMWH for patients with both THR and TKR. The results of analyses that compared NOACs with each other suggested that dabigatran is the least cost-effective option. There is limited evidence directly comparing rivaroxaban with apixaban, but our results suggested that rivaroxaban dominates apixaban for patients within the United Kingdom. CONCLUSIONS: Economic analyses of NOACs for primary VTE prophylaxis following THR and TKR surgeries show reasonable consistency in the model structures used and events captured. The results strongly support the cost-effectiveness of edoxaban over rivaroxaban, with the least cost-effective NOACs. However, more research is needed to assess the cost-effectiveness of apixaban and edoxaban.