effectiveness ratio (ICER). Boosting technique was applied for assessing uncertainty in cost-effectiveness analyses. The robustness of findings was tested in sensitivity analyses. RESULTS: Although there were no significant differences in medication adherence and hospitalization outcomes between two groups, patients in CR programs had a gradually improved medication adherence and lower hospitalization over time. Mean annual costs (2003 value) were $3172 and $2092 per patient for CR and control group, respectively. The ICER was $2558 for 1% improvement in medication adherence and $1080 for an additional hospitalization avoided. CONCLUSIONS: CR programs offered benefits of improving medication adherence and reducing hospitalization over time although it was costly in the beginning of its provision. Trade-off of increase in costs for the increase in benefits should be considered.

PCV50

COST EFFECTIVENESS ANALYSIS OF AZILSARTAN MEDOXOMIL AND CHLORTHALIDONE FIXED DOSE COMBINATION THERAPY FOR TREATMENT OF HYPERTENSION

A121

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OBJECTIVES: To analyze the cost-effectiveness of treating hypertensive patients with azilsartan medoxomil and chlorothalidone fixed dose combination (AZL-M/CLD FDC) therapy compared with other angiotensin receptor blocker (ARB) and hydrochlorothiazide (HCT) combinations commonly available in the US market.

METHODS: A Markov Cohort Simulation approach was utilized. Simulated patients start in a hypertensive state and are followed over multiple time periods as they transition between mutually exclusive health states. Cost per Quality Adjusted Life Year (Cost/QALY) and Incremental Cost-effectiveness Ratios (ICERs) are calculated for all possible dose combinations. Cardiovascular disease (CVD) risks were based on the Framingham risk equations. FDCs of HCT and eight ARBs commonly used in the US market (Atacand HCT, Avalide, Benicar HCT, Hyzaar, Diovan HCT, generic Losartan HCT, Micardis HCT and Teveten HCT) were included in the analyses.

RESULTS: Results suggest that AZL-M/CLD FDC is less expensive and more effective than any of the ARB versus all branded ARB/HCT FDC comparators. When considering average costs and the CVD risks based on the Framingham risk equations for all therapies over a five year time horizon, AZL-M/CLD FDC would remain the least expensive and most effective branded ARB/Diuretic FDC therapy up to a 23.5% unit cost increase with the average office SBP reduction of -22.3% and up to 18.1% unit cost increase with the 24-hour ambulatory BP reduction of -17.0%. CONCLUSIONS: AZL-M/CLD FDC is predicted to be less expensive and more effective in reducing blood pressure and cardiovascular risk when compared to all branded ARB/HCT FDC comparators during a five year time horizon.

PCV51

DABIGATRAN VERSUS WARFARIN FOR ATRIAL FIBRILLATION IN COLOMBIA

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OBJECTIVES: To estimate the cost-effectiveness of dabigatran compared to warfarin in non-complicated atrial fibrillation in Colombia.

METHODS: We developed a Markov model to represent the health states of atrial fibrillation and its complications: 6 health states and 2 transitional states were considered, including: asymptomatic non-stroke, asymptomatic stroke, pulmonary embolism and death. Major and minor hemorrhage were considered transitory in the model. Probabilities were derived from published clinical trials. Resource use was estimated from the Colombian Society of Cardiology guidelines and validated to adjust to usual practice. Direct medical costs were derived from published sources (public or private) and indirect costs (predicted wages lost and transportation costs) were obtained from the most recent National Health Survey. Utilities were obtained from a systematic literature review. Two separate analysis, payer and societal perspective, were performed in a 20-year horizon. Maximum and minimum values of effectiveness and resource use were included in the sensitivity analysis.

The results were discounted at 3% annually. RESULTS: After 20 years of follow up, discounted direct medical costs accounted for USD$270,500 for Warfarin and $28,860 and $79,860 for 150mg and 110mg of Dabigatran, respectively. When taking into account indirect costs, Warfarin increased their costs by 13% while Dabigatran costs were increased by 9%. Estimated life years for Dabigatran were higher (9.40 and 9.29 for 150mg and 110mg, respectively) as well as the QALYs (8.48, 8.39) than for Warfarin (9.09 LY and 8.12 QALYs). The calculated ICER was $23,760 and $34,690 and 9.29 for 150mg and 110mg, respectively) as well as the QALYs (8.48, 8.39) than for Warfarin (9.09 LY and 8.12 QALYs). The calculated ICER was $23,760 and $34,690 for Warfarin and $50,000/QALY threshold.

CONCLUSIONS: Dabigatran was approved in the United States to reduce the risk of stroke, systemic embolism in patients with non-valvar atrial fibrillation (AF) and systemic embolism. A cohort of 5,000 patients treated with dabigatran during their lifetime gained 40,238 QALYs (standard: 38,178 QALYs) with incremental costs of £35.9m (standard: £37.3m). The incremental cost-effectiveness ratio (ICER) of dabigatran versus standard treatment was estimated at £17,437, below the Slovakian acceptable threshold (£18,000 per QALY gained). The sensitivity analysis consistently demonstrated the cost-effectiveness of dabigatran.

CONCLUSIONS: Dabigatran represents a cost-effective treatment for preventing strokes in patients with NVAF in Slovakia.

PCV54

COST-EFFECTIVENESS ANALYSIS OF DABIGATRAN COMPARED TO WARFARIN FOR STROKE PREVENTION IN ATRIAL FIBRILLATION IN A MEDICARE POPULATION

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OBJECTIVE: Dabigatran was approved in the United States to reduce the risk of stroke, systemic embolism in patients with non-valvar atrial fibrillation (AF) and systemic embolism. Dabigatran has several potential advantages over the current standard of care (warfarin), including a generally better side effect profile, fewer drug interactions, and no international normalized ratio (INR) monitoring, but it is considerably more expensive. The objective of this analysis was to determine the cost-effectiveness of dabigatran versus warfarin for AF in a Medicare population.

METHODS: A Markov model was used to simulate outcomes for patients aged 65 with AF and a (CHADS2-VASc) score ≤1. A 5-year time horizon and a managed care perspective were employed in this analysis. Data comparing the clinical performance of dabigatran and warfarin was based on the RE-LY trial and the literature. The base-case consisted of a cohort of patients with NVAF, CHADS2-VASc ≤1 and no contraindications to anticoagulation therapy. The modelled consequences of the clinical events were costs, disability and/or mortality, and the results were discounted at 3% annually.

CONCLUSIONS: Dabigatran was more cost-effective than warfarin in the Medicare population. Dabigatran has several potential advantages over the current standard of care (warfarin), including a generally better side effect profile, fewer drug interactions, and no international normalized ratio (INR) monitoring, but it is considerably more expensive. The objective of this analysis was to determine the cost-effectiveness of dabigatran versus warfarin for AF in a Medicare population.