PCV120

Cost-Effectiveness of Edoxaban Compared with Warfarin for the Prevention of Stroke and Systemic Embolic Events in the UK

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OBJECTIVES: To assess the cost-effectiveness of edoxaban 60mg versus warfarin for the prevention of stroke and systemic embolic events among patients with non-valvular atrial fibrillation (NVAF) in the UK, from the perspective of the NHS. METHODS: A Markov model was developed to simulate the course of disease in hypothetical cohorts of patients with NVAF and to assess the cost-effectiveness of edoxaban versus the current UK standard of care, warfarin. The model used data from the ENGAGE trial, and was based on patients with CHADS2 and with CHA2DS2-VASc ≥2. Utilities were derived from standard literature. Costs were extracted from the literature and the NHS reference cost database; both were discounted at 3.5% per annum. Health outcomes were assessed in quality-adjusted life years (QALYs), and evaluated over a lifetime time horizon. Deterministic and probabilistic sensitivity analyses were performed to investigate uncertainty in input parameters on the results. RESULTS: In the base case analysis (CHADS2 ≥2), the incremental cost-effectiveness ratio (ICER) for edoxaban compared with warfarin was £12,881 per QALY gained. At a threshold of £20,000 per QALY, the net monetary benefit associated with edoxaban was £1,406. Edoxaban was also cost effective compared with warfarin in higher risk (CHADS2 ≥2) and higher anticoagulant control (CHADS2>60) subgroups (ICER £7,012 and £20,576 per QALY, respectively). Sensitivity analyses confirmed these findings and exploration of 12-month and 18-months were examined in scenario analyses. Additionally, probabilistic sensitivity analyses accounted for uncertainty in model parameters were conducted which revealed apixaban was more likely to be cost-effective than all other strategies.

The results supported that the treatment was cost-effective for the symptomatic treatment of patients with chronic stable angina in Greece.

PCV123

Cost-Utility Analysis of Apixaban in the Acute Treatment and Prevention of Venous Thromboembolism in France

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OBJECTIVES: To evaluate the cost-effectiveness of apixaban vs. existing therapeutical alternatives (fondaparinux/VKA, LMWH/VKA, rivaroxaban, dabigatran) in the acute treatment and prevention of venous thromboembolism (VTE) from the French National healthcare insurance perspective. METHODS: A cohort of patients with VTE were placed on one of five therapeutic strategies for 6-months and tracked over a course of 5-years in a Markov model. Modeled clinical events included recurrent VTE, major bleed, clinically-relevant non-major bleed, chronic thromboembolic pulmonary hypertension, post-thrombotic syndrome and death. Data on efficacy and safety were derived from a network meta-analysis. Medical costs of clinical events were extracted from a dedicated analysis of French health administrative databases and utility data were derived from literature. To assess the cost-effectiveness of these findings, 12-month and 18-months were examined in scenario analyses. Additionally, probabilistic sensitivity analyses accounted for uncertainty in model parameters were conducted which revealed apixaban was more likely to be cost-effective than all other strategies.

An extended treatment duration of 12 months, apixaban remained dominated and dabigatran became cost-effective compared to fondaparinux/VKA (ICUR: 3,098€/QALY) and LMWH/VKA (ICUR 2,381€/QALY). Similar results were observed for treatment duration of 18 months with an increase of ICUR to 5,634€/QALY and 0,99€/QALY, respectively. CONCLUSIONS: Apixaban can offer substantial clinical and economic benefits over alternative therapies for acute and extended treatment of VTE.

PCV124

A Literature Review to Evaluate the Pharmacoeconomic Value of Ranolazine for the Treatment of Symptomatic Chronic Stable Angina

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OBJECTIVES: To conduct a systematic review on the pharmacoeconomic value of ranolazine vs standard-of-care (SoC) for the treatment of symptomatic chronic stable angina (CSA). METHODS: Two investigators conducted a Cochrane Library and Cost-Effectiveness Analysis Registry without time limits were searched. Articles in English were identified with the following keywords: cost, economic, ranolazine, ranexa, angina, cardiovascular disease therapy. The search included studies that were independently reviewed by two investigators against pre-determined inclusion and exclusion criteria. The Quality of Health Economic Studies scale was used to assess the quality of the included studies. The data of selected studies were extracted onto a data extraction form and subsequently, were synthesized. Outcomes and effectiveness data were obtained from CSA, added to SOC. Further research is required to evaluate the cost-effectiveness of ranolazine in each angina frequency group.

PCV125

Cost-Utility of Statin in Secondary Prevention: A Propensity Score Matched Administrative Database

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OBJECTIVES: Cost-effectiveness analysis for secondary prevention in patients with statin intake. Quality-of-life data supported the cost-utility values from foreign populations. Effectiveness from observational database and utility values from a similar population provides real world evidence. The aim of this study is to evaluate the cost-effectiveness of secondary prevention in patients with statin in fatal and non-fatal events based on real world data. METHODS: A cohort of patients with VTE were placed on one of five therapeutic strategies for 6-months and tracked over a course of 5-years in a Markov model. Modeled clinical events included recurrent VTE, major bleed, clinically-relevant non-major bleed, chronic thromboembolic pulmonary hypertension, post-thrombotic syndrome and death. Data on efficacy and safety were derived from a network meta-analysis. Medical costs of clinical events were extracted from a dedicated analysis of French health administrative databases and utility data were derived from literature. To assess the cost-effectiveness of these findings, 12-month and 18-months were examined in scenario analyses. Additionally, probabilistic sensitivity analyses accounted for uncertainty in model parameters were conducted which revealed apixaban was more likely to be cost-effective than all other strategies.