VKA-unsuitable, respectively) formed the basis of the analysis. Clinical events (ischemic strokes, hemorrhagic strokes, intracranial hemorrhages, other major bleeds, clinically relevant non-major bleeds, myocardial infarctions and cardiovascular hospitalizations) were modeled over a lifetime horizon based on the clinical efficacy of each comparator, as reported by two phase-III clinical trials (ARISTOTLE and AVERROES). Resource use with regards to patient monitoring was elicited via an experts' panel (cardiologists & internists). Cost calculations reflect the local clinical setting, and followed a third-party payer perspective (Euros, year 2013, discounted at 3%). **RESULTS:** Apixaban was projected to reduce the occurrence of clinical events and increase quality adjusted life expectancy compared to warfarin and aspirin (an incremental increase of 0.225 and 0.274 QALYs per patient, respectively). Taking into account costs of medications, treatment and management of events, the incremental cost-effectiveness ratio for apixaban versus warfarin and aspirin was estimated at 12,154.6 €/QALY and 5,980.6 €/QALY gained, respectively. Extensive sensitivity analyses indicated that results were robust over a wide range of inputs. **CONCLUSIONS:** Based on the results of this analysis, apixaban can be a cost-effective alternative to warfarin and aspirin for the management of VKA-suitable and VKA-unsuitable patients with NVAF, respectively, in Greece.

PCV76

TOTAL COSTS AND OUTCOMES OF DRUG-ELUTING STENT PLACEMENT WITH INTRAVASCULAR ULTRASOUND (IVUS) COMPARED WITH ANGIOGRAPHY ALONE: A COST-EFFECTIVENESS ANALYSIS FROM THE PERSPECTIVE OF THE ITALIAN HEALTH SYSTEM

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OBJECTIVES: Intravascular ultra-sound (IVUS) allows physicians to generate a superior image of coronary arteries during percutaneous coronary interventions (PCI), providing a tomographic, 360-degree view of the arterial wall from the inside, which allows a more accurate and complete assessment than is possible with angiography. The purpose of this study was to understand the cost-effectiveness of IVUS compared with traditional angiography techniques in drug-eluting stent (DES) implantation, from the perspective of the Italian health system. **METHODS:** A Markov model was developed to extrapolate the comparative costs and outcomes of a theoretical population of 1000 patients undergoing DES implantation with traditional angiography alone, or in conjunction with IVUS. The model assesses cardiac events, including revascularisations and myocardial infarctions from a health system perspective. Outcomes with and without IVUS were based on a meta-analysis by Zhang et al (2013). Because of limited clinical evidence to inform the long-term outcomes of IVUS compared with angiography, the model either assumes the benefit of IVUS is conferred only in the first year of treatment, or that the benefit is maintained permanently. **RESULTS:** Using IVUS during PCI cost an average of €542 per patient, and yields an additional 0.022 quality adjusted life years (QALYs) per patient. In a population of 1,000 patients, IVUS led to a reduction of 6.7 revascularisations and 5.9 less myocardial infarctions (MI) over the lifetime of a patient. When the revascularisation and MI benefit of IVUS is assumed to extend for the patient's lifetime, angiography with IVUS costs €38 per patient and yields an additional 0.09 QALYs over a patient's lifetime; avoiding 13.4 MIs and 12.3 revascularisations per 1,000 patients. **CONCLUSIONS:** IVUS appears to be a cost-effective addition to traditional angiography in DES placement in Italy, with the increased upfront cost of IVUS offset by reduced cardiac events in IVUS-treated patients over time.

PCV77

COST-EFFECTIVENESS OF APIXABAN VERSUS OTHER NEW ORAL ANTICOAGULANTS FOR THE PREVENTION OF STROKE: AN ANALYSIS OF PATIENTS WITH ATRIAL FIBRILLATION IN GREECE

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OBJECTIVES: Apixaban, dabigatran (150 mg BID and 110 mg BID) and rivaroxaban are three novel oral anticoagulants (NOACs) currently approved for stroke prevention and systemic embolism in non-valvular atrial fibrillation (NVAF) patients. The objective of this analysis was to assess the cost-effectiveness (CE) of apixaban against other NOACs for the prevention of stroke in patients with NVAF in Greece. **METHODS:** A Markov model that evaluated clinical events, quality adjusted life expectancy and costs for patients treated with apixaban or other NOACs formed the basis of the analysis. Clinical events (ischemic strokes, hemorrhagic strokes, intracranial hemorrhages, other major bleeds, clinically relevant non-major bleeds, myocardial infarctions and cardiovascular hospitalizations) were modeled for a lifetime horizon. Due to lack of head-to-head comparisons, efficacy and safety data was derived from an indirect treatment comparison (ITC). The key pivotal trials, ARISTOTLE, ROCKET-AF and RE-LY, all included warfarin as a comparator therefore allowing for an ITC. Resource use with regards to patient monitoring was elicited via a panel of experts (cardiologists & internists). Cost calculations reflect the local clinical setting and followed a third-party payer perspective (Euros, year 2013, discounted at 3%). **RESULTS:** Apixaban was projected to reduce the occurrence of clinical events and increase quality-adjusted life expectancy and costs of treatment compared to other NOACs. Taking into account costs of medications, treatment and management of events, the incremental cost-effectiveness ratios for apixaban 5 mg BID versus dabigatran 150 mg BID, dabigatran 110 mg BID and rivaroxaban 20 mg QD were estimated at 15,403€/QALY, 4,955€/QALY and 10,130 €/QALY gained, respectively. Extensive sensitivity analyses indicated that results were robust over a wide range of inputs. **CONCLUSIONS:** Based on the results of this analysis, apixaban can be a cost-effective alternative to other NOACs, for the prevention of strokes in patients with NVAF in Greece.

PCV78

PHARMACOECONOMIC EVALUATION ACCEPTABILITY OF CLOPIDOGREL VERSUS ACETYLSALICYLIC ACID IN PATIENTS WITH CARDIOVASCULAR DISEASE FOR STROKE PREVENTION IN UKRAINE

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OBJECTIVES: The results of many clinical trials demonstrate the benefit of long-term antiplatelet therapy in reducing the risk of cardio- and cerebrovascular complications. Both acetylsalicylic acid (ASA) and clopidogrel are effective, but have potentially serious side effects, and clopidogrel is more expensive than ASA. The purpose of the study is to evaluate the pharmacoeconomic acceptance of clopidogrel versus ASA in patients with atherosclerotic vascular disease manifested as either recent ischaemic stroke, recent myocardial infarction, or symptomatic peripheral arterial disease to prevent non-fatal stroke and death rate according to the clinical trial CAPRIE from Ukrainian perspective. **METHODS:** Outcomes of the clinical study CAPRIE, modeling "decision tree" and analysis "cost-effectiveness" were used. **RESULTS:** The results of the clinical trial CAPRIE study showed, that clopidogrel is more effective versus ASA for reducing the risk of nonfatal stroke: absolute risk reduction is -2.7%. Model "decision tree" was built using the probabilities of events (nonfatal stroke and death) from the study CAPRIE. Direct costs were calculated taking into account the costs of antiplatelet therapy, of nonfatal stroke treatment (drugs, diagnosis, patient's stay in hospital) and the cost of rehabilitation after stroke. Indirect costs are not taken into account because the patients were of retirement age (62.5 years old). As a result of calculations it was found, that antiplatelet therapy with clopidogrel is more expensive and more effective (2 additional lives saved per 1000 patients over 1.91 years) compared with ASA. Due to the threshold of society "willingness to pay" per 1 life saved, or 1 QALY, use of clopidogrel as antiplatelet agent in patients with cardiovascular disease is economically profitable for Ukraine. **CONCLUSIONS:** The use of clopidogrel as an antiplatelet agent in patients with cardiovascular disease to prevent nonfatal stroke compared to the ASA is economically profitable for Ukraine.

PCV79

AN ANALYSIS OF THE COST EFFECTIVENESS OF LEFT ATRIAL APPENDAGE CLOSURE FOR THE PREVENTION OF STROKE IN PATIENTS WITH ATRIAL FIBRILLATION AND ABSOLUTE CONTRAINDICATIONS TO WARFARIN THERAPY

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OBJECTIVES: Stroke and its associated disability costs the European Union an estimated €62 billion per year. Warfarin is the mainstay for stroke prevention in atrial fibrillation (AF), but many patients have absolute contraindications to this drug. The Watchman device for left atrial appendage closure (LAAC) received CE mark for stroke prevention in AF patients with contraindications to warfarin. This analysis sought to estimate the cost effectiveness of treating warfarin-ineligible AF patients with LAAC as compared to standard aspirin therapy. **METHODS:** A Markov model was developed comparing clinical outcomes and total costs between patients treated with LAAC or aspirin over 5 and 10 years based largely on clinical outcomes from the Aspirin and Plavix Registry (ASAP) and ACTIVE trials. Clinical events included ischemic stroke, TIA, systemic embolism, bleeding, and acute myocardial infarction as well as procedure-related events. Germany was chosen as the country of analysis because of its unique DRG for the LAAC procedure. Acute costs were taken from German DRGs and long-term disability costs were taken from the Berlin Acute Stroke Study. Sensitivity analysis was performed on clinical and cost inputs; the model was most sensitive to changes in the rate of ischemic stroke. **RESULTS:** LAAC demonstrated a benefit in terms of ischemic strokes and mortality avoided. The cost per ischemic stroke avoided was €91,020 and €24,722 at 5 and 10 years, respectively. The cost per life year gained for LAAC versus aspirin was €22,694 at 5 years and decreased to €5,859 at 10 years. **CONCLUSIONS:** LAAC is a cost-effective alternative to aspirin therapy in patients with contraindications to warfarin. Cost offsets achieved with LAAC become considerably more pronounced over time. This analysis highlights the importance of considering the lifetime costs of stroke prevention in AF, especially as the probability of both stroke and bleeding increases with patient age.

PCV80

COST-EFFECTIVENESS OF RIVAROXABAN IN THE PREVENTION OF STROKE IN NON-VALVULAR ATRIAL FIBRILLATION PATIENTS IN ITALY

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OBJECTIVES: To perform a cost-effectiveness analysis of rivaroxaban (once-daily) in the prevention of stroke and systemic embolism of patients with non-valvular atrial fibrillation (NVAF) and in patients sub-groups from the perspective of the Italian health care system (SSN). **METHODS:** A Markov model was developed with a lifetime timeframe where a hypothetic NVAF patients' cohort is treated with Vitamin-K antagonists (VKAs), antiplatelet drugs (ASA) or no therapy. Patients remain stable or progress towards other health states (ischemic or hemorrhagic stroke, myocardial infarction and bleedings) until death. The base case compares rivaroxaban with VKAs. In subgroup analyses, rivaroxaban is compared with patients at highest unmet medical need: 1. VKA patients with poor INR control, 2. patients under ASA or 3. not treated. Clinical data were derived from ROCKET-AF trial or a network meta-analysis. Utility data were retrieved from published literature. Health care resources consumption was valued using average regional tariffs in Italy. Since rivaroxaban price is not officially published, the price of the first novel oral anticoagulant approved in this indication in Italy was considered. Model outcomes are expressed in terms of incremental cost per quality adjusted life year (QALY) gained (ICER). Univariate and probabilistic sensitivity analyses were performed **RESULTS:** In the base case, rivaroxaban showed to be cost-effective compared to VKA with an