

LYG for Estonia. Sensitivity analyses showed that time horizon, discounting and follow-up cost of stroke are sensitive factors. Difference in co-payment for workers and retired patients (Estonia) marginally impacted ICERs. Probabilistic sensitivity analysis showed that the probability for O-3EE to be cost-effective is higher than 95% in Estonia (threshold €32,000/LYG). One-way sensitivity analyses showed strong robustness in Ireland (threshold €20,000/QALY). **CONCLUSIONS:** The incremental cost-effectiveness ratios indicated that adding 1g O-3EE to standard treatment in secondary prevention post-MI was in the range likely to be considered cost-effective in Ireland and Estonia.

PCV66

PHARMACOECONOMIC ANALYSIS OF AZILSARTAN MEDOXOMIL IN PATIENTS WITH ARTERIAL HYPERTENSION: COMPARISON WITH VALSARTAN, TELMISARTAN, LOSARTAN AND IRBESARTAN IN THE MEXICAN CONTEXT
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OBJECTIVES: To compare the incremental cost-effectiveness ratio (ICER) and incremental cost-utility ratio (ICUR) of the angiotensin II receptor antagonist Azilsartan vs current treatments of the same drug class as valsartan, telmisartan, losartan and irbesartan. **METHODS:** Cost-effectiveness and cost-utility analysis were conducted using a Markov model with a 35-year temporal horizon for patients over the age of 45 and diagnosed with systemic arterial hypertension to calculate the ICERs of each treatment. The model adopts the Mexican public health institutions' perspective. Four health states were incorporated: alive and healthy, hypertensive with non-fatal acute myocardial infarction (AMI), hypertensive with non-fatal stroke and death. Transition probabilities were calculated based on the national risk of having a stroke or AMI and the probability of having a vascular complication depending on blood pressure levels (in mmHg). Costs and effectiveness data were taken from health institutions, producer pharmaceutical companies or extracted from published literature. Outcome measures included ICER and ICUR. Cost-effectiveness was determined according to the 1GDP/capita threshold established by the National Health Council in Mexico. **RESULTS:** Azilsartan was found to be dominant when compared with telmisartan, valsartan and irbesartan. Azilsartan was also more effective when compared with losartan (10.76 vs. 10.47 life years gained) although more costly (USD\$ 6,118.92 vs. USD\$ 5,192.71). The ICER was USD\$ 3,202.84 per life year gained. According to the cost-utility analysis, the ICUR per quality-adjusted life year gained was USD\$ 3,458.09. **CONCLUSIONS:** The ICER and ICUR are well below 1GDP (USD\$ 9,350.07) per capita versus losartan. Both azilsartan and losartan were found to be dominant in comparison with the other included treatments. Azilsartan is therefore a very cost-effective intervention for the Mexican population over 45 with systemic arterial hypertension.

PCV67

MIND THE GAP! GEOGRAPHIC TRANSFERABILITY OF ECONOMIC EVALUATION IN HEALTH

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OBJECTIVES: Transferring cost-effectiveness information between geographic domains offers the potential for more efficient use of analytical resources. However, it is difficult for decision makers to know when they can rely on cost-effectiveness evidence produced for another context. This paper explores the transferability of economic evaluation results produced for one geographic area to another location of interest, and outlines an approach to identify factors to predict when this is appropriate. **METHODS:** We developed multilevel statistical models for the integration of published cost-effectiveness data to assess the impact of contextual effects on country level; whilst controlling for baseline characteristics within, and across, a set of economic evaluation studies. Explanatory variables were derived from a list of factors suggested in the literature as possible constraints on the transferability of cost-effectiveness evidence. We illustrated our approach using published estimates of the cost-effectiveness of statins for the primary and secondary prevention of cardiovascular disease (CVD). 2094 estimates of the costs and effects of statins were abstracted from 67 studies related to 23 geographic domains, together with covariates on data, study and country level. **RESULTS:** The proportion of variation at the country-level observed depends on the appropriate multilevel model structure and never exceeds 15% for incremental effects and 21% for incremental cost respectively. Key sources of variability are patient and disease characteristics, intervention cost and a number of methodological characteristics defined on the data level. There were fewer significant covariates on the study and country levels. **CONCLUSIONS:** Our analysis suggests that variability in cost-effectiveness data is primarily due to differences between studies, not countries. Further, comparing different models suggests that data from multinational studies severely underestimates country-level variability. Additional research is needed to test the robustness of these conclusions on other sets of cost-effectiveness data, and to further explore the appropriate set of covariates.

PCV68

ECONOMIC EVALUATION OF INITIATION WITH ENDOTHELIN RECEPTOR ANTAGONISTS IN THE TREATMENT OF PULMONARY ARTERIAL HYPERTENSION IN SPAIN

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OBJECTIVES: To evaluate health outcomes and costs of initiation with endothelin receptor antagonists [ERA] monotherapy (ambrisentan or bosentan) followed by sequential combination with phosphodiesterase-5 inhibitors [PDE-5] and prostanoids in the treatment of pulmonary arterial hypertension in Spain. **METHODS:** A Markov model was developed based on New York Heart Association functional classes. Transition probabilities [TP] for ERA initiation were gathered from the pivotal clinical trials. Outcomes were measured in quality-adjusted life years [QALY]. A panel of 3 independent experts reached a consensus on patient management based on clinical practice. Patients initiated treatment with either ambrisentan or bosentan, and revised treatment every 12 weeks based on their health status and previous medication records. A National Health System perspective was adopted. Pharmacological costs and costs associated with very frequent adverse events [AE] (i.e. edema and hepatic abnormalities) were included. Following a first-order Monte Carlo simulation approach, 1,000 hypothetical patients were observed in a temporal horizon of 60 weeks. This simulation was repeated 1,000 times. **RESULTS:** Average (per-patient and year) pharmacological costs [95% CI] were €35,550 [€34,944–€36,196] and €40,224 [€39,264–€41,212] for initiation with ambrisentan and bosentan, respectively. Average costs associated with AE management were €117 [€110–€124] and €171 [€160–€182], respectively. No clinically relevant differences in average QALY were found: 0.6853 [0.6836–0.6870] and 0.6903 [0.6885–0.6921], respectively. This agrees with published meta-analyses and a priori expert judgment. Initiation with ambrisentan would bring about cost savings of €4,727 [€3,903–€5,620]. From a cost-minimization perspective, if the same TP were considered for both initiation alternatives, initiation with ambrisentan would provide cost savings of €4,952 [€4,898–€5,007] (using ambrisentan's TP) and €4,770 [€4,718–€4,819] (using bosentan's TP). **CONCLUSIONS:** Initiation with ambrisentan monotherapy followed by sequential combination with PDE-5 and prostanoids yields comparable outcomes at lower costs than initiation with bosentan. These results might be considered in hospital pharmacy budget allocation decision making.

PCV69

ECONOMIC EVALUATION OF THROMBO INCODE, A GENETIC PLATFORM FOR THE ASSESSMENT OF VENOUS THROMBOEMBOLISM (VTE) RISK IN PATIENTS WITH A PATTERN OF VTE OR A CONDITION THAT SUGGESTS A HEREDITARY COMPONENT

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OBJECTIVES: To conduct an economic analysis of the risk assessment of VTE with Thrombo inCode, a genetic platform, in patients with a pattern of VTE or a condition that suggests a hereditary component, compared with the standard methods so far used (Factor V Leiden and prothrombin G20210A mutation). **METHODS:** A Markov model was developed with 7 states of health (thrombophilia, no thrombophilia, VTE, major bleeding, intracranial hemorrhage, no intracranial hemorrhage, and death). The predictive ability of VTE from the identification of thrombophilia with Thrombo inCode and the standard method, was obtained from three studies of the method validation performed in three different populations (3,661 patients in total). It was assumed that patients with thrombophilia positively identified undergo a preventive treatment of VTE, which involves both reducing the number of VTE as the increase in major bleeding. The utilities and costs of Markov states were obtained from the literature and Spanish sources. The analysis was done from the National Health System perspective, for a time horizon of 5 years and lifetime. An annual discount rate of 3.5% for costs and benefits was applied. **RESULTS:** For a Thrombo inCode price of 290 €, this genetic platform would be the dominant option for any time horizon from 5 years. The threshold price of Thrombo inCode to reach the incremental cost-effectiveness ratio (ICER) threshold generally accepted in Spain (30,000 €/QALY) would range between € 1,069 and € 1,284. Probabilistic analyses indicate that Thrombo inCode assessment is dominant in the 97.2 to 98.6% of the tests, according to the selected population. **CONCLUSIONS:** Thrombo inCode is a cost-effective genetic option in VTE risk assessment compared with the standard method.

PCV70

COST-EFFECTIVENESS OF SMOKING CESSATION INTERVENTIONS IN SMOKERS WITH CARDIOVASCULAR DISEASE IN THE NETHERLANDS

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OBJECTIVES: Limited pharmaceutical options are available for smoking cessation interventions for smokers with a history of cardiovascular disease (CVD) in the Netherlands. The objective of our study was to assess the cost-effectiveness of varenicline versus nicotine replacement therapy (NRT) in such a population. **METHODS:** A lifetime horizon Markov model was developed to compare the cost-effectiveness of smoking cessation therapies from the health care provider perspective. Efficacy data (continuous abstinence rates) for each therapeutic option was obtained from an indirect comparison of available clinical trials. The population of smokers with cardiovascular disease was divided into three cohorts: those with a history of coronary heart disease (CHD), stroke and peripheral vascular disease (PVD). In the model, the cohorts are followed as they progress through potential disease states including CHD, stroke, PVD, COPD, mouth cancer and lung cancer. Transition probabilities depend on age (35–65, 65+), gender and smoking status (current, former or never smoker) allowing for variations in the patient populations. Following the Dutch pharmacoeconomic research guideline, costs and effect were discounted at 4% and 1.5%, respectively. Univariate and probabi-