trolled with ≥ 3 different classes of antihypertensive therapy). Catheter-based renal denervation (RDN) is a novel, minimally invasive therapy for treatment-resistant hypertension. The aim of this study was to assess the cost-utility of RDN as compared to current standard of care (SoC) for refractory hypertension in Belgium. **METHODS:** A lifetime state-transition, Markov model was used, with health-states encompassing possible long-term consequences of hypertension: stroke, myocardial infarction, angina, heart failure, end-stage renal disease. Risk equations were used to calculate the risk of events with changing systolic blood pressure (SBP). Reductions in SBP following RDN vs. SoC pertain to the results of the Symplicity HTN-2 randomized controlled trial. The underlying modeled cohort was defined similar to the same trial: mean baseline SBP 178 mmHg, mean age 58 years, 34% with diabetes mellitus. Costs pertained to published economic evaluations or public tariffs and reflected the Belgian payer perspective. Costs and health outcomes were discounted at a rate of 3%, and 1.5% respectively. **RESULTS:** Projected lifetime costs were 21,743€ and 24,558€ in the SoC and RDN arms respectively, while total projected life years were 16.43 and 17.23. RDN increased patients' quality of life with 0.93 quality-adjusted life years (QALYs) vs. SoC. This resulted in an incremental cost-utility ratio (ICUR) of 3,020€/QALY. Results were most sensitive to changes in SBP reductions, and the cost of RDN procedure, but remained under a willingness to pay (WTP) threshold of 20,000€/QALY. Probabilistic sensitivity analyses showed acceptable cost-effectiveness in 100% of cases, under a WTP threshold of 20,000€/QALY. **CONCLUSIONS:** Results of these analyses suggest that, under the current model settings, catheter-based RDN procedure could be a cost-effective strategy for resistant hypertension in Belgium.

PCV93

COST-EFFECTIVENESS ANALYSIS OF ATORVASTATIN COMPARED TO SIMVASTATIN IN THE PREVENTION OF CARDIOVASCULAR DISEASES IN THE CZECH REPUBLIC

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OBJECTIVES: To assess the impact of atorvastatin compared to simvastatin use in the Czech Republic on cardiovascular diseases (CVD), Life-Years Gained (LYG) and Quality-Adjusted Life Years (QALY), based on the real proportional consumption of both statins in particular strengths (10 mg, 20 mg, 40 mg). **METHODS:** Life-time cost-effectiveness Markov cohort model was developed with 1 year cycle length and 5 health sates, i.e. Alive without CVD, Alive with experience of CVD, Non-fatal CVD, Fatal CVD and Death. The probability of transition among health states were derived from Framingham equations or from SCORE equations (probability of the first non/fatal CVD), Czech life-tables (background mortality) and international cohort studies (probability of subsequent CVD). Patients enter the model with base-line risk characteristics: age, proportions of males, diabetics, smokers, level of systolic blood pressure and cholesterol (total and HDL) level. The efficacy data for particular statin and its strength were derived from latest meta-analyses. Drug acquisition costs of atorvastatin 10 mg and 20 mg were 10% higher compared to simvastatin 20 mg and 40 mg. The costs of fatal, non-fatal CVD and one-year follow-up after CVD were 1,410 EUR, 1,460 EUR and 580 EUR. Probabilistic sensitivity analysis (PSA) using a willingness to pay (WTP) threshold equal to 1 times GDP per capita (14,300 EUR) was applied. **RESULTS:** Over a life-time horizon, atorvastatin compared to simvastatin provides 8.14 QALYs vs. 8.07 QALYs, 11.33 LYG vs. 11,24 LYG, 44.8% vs. 46.3% of non-fatal CVD and 28.2% vs. 29.4% of fatal CVD. The increment of total costs was 330 EUR for atorvastatin, ICER for atorvastatin vs. simvastatin was then 4,720 EUR/ QALY. **CONCLUSIONS:** The use of atorvastatin generates 0.07 QALYs more compared to simvastatin per patient in the Czech Republic. There is a 98.5% probability of atorvastatin being cost-effective at the selected WTP.

PCV94

NOVEL ORAL ANTICOAGULANTS VERSUS WARFARIN – A BUSINESS CASE ANALYSIS

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OBJECTIVES: The decision on whether to use more expensive novel oral anticoagulants (NOACs) or invest resources for quality improvement of warfarin therapy requires inputs of both clinical and economic outcome analyses. Outcomes of NOACs comparing to warfarin therapy at various levels of patient-time in therapeutic range (TTR) in patients with atrial fibrillation were examined from health care provider's perspective. **METHODS:** A Markov model was designed to compare life-long economic and treatment outcomes of warfarin and NOACs in a hypothetical cohort of 65-year-old atrial fibrillation patients with $CHADS_2$score 2 or above. Model inputs were derived from clinical trials published in literature. Outcome measure was incremental cost per quality-adjusted life-year (QALY) gained (ICER). **RESULTS:** Expected cost and QALYs of NOACs were USD96,602 and 9.957, correspondingly, in base-case analysis. Using USD50,000 as the threshold of willingness-to-pay per QALY, NOACs therapy was cost-effective when TTR of warfarin therapy was 60%, or monthly cost of warfarin management increased by 1.5-fold or above to achieve 70% TTR. Warfarin therapy was cost-effective when TTR of warfarin was 70% with no increment in monthly cost of care, or when TTR reached 75% with monthly cost of warfarin care increased up to 2.5-fold. At TTR 60%, 70% and 75%, NOACs was cost-effective when monthly drug cost was <USD208, <USD135-200 and <USD96-160, respectively. 10,000 Monte Carlo simulations showed NOACs to be cost-effective in 77.2%, 52.7% and 31.7% of time at TTR of 60%, 70% and 75%, respectively. **CONCLUSIONS:** Acceptance of NOACs as cost-effective was highly depended upon drug cost, anticoagulation control for warfarin, and anticoagulation service cost.

PCV95

SCREEN OR NOT TO SCREEN FOR PERIPHERAL ARTERIAL DISEASE: GUIDANCE FROM A DECISION MODEL

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OBJECTIVES: Asymptomatic Peripheral Arterial Disease (PAD) is associated with greater risk of acute cardiovascular events. American heart association and American college of cardiology clinical practice guidelines recommend low dose aspirin to reduce the cardiovascular events and mortality in PAD patients. As asymptomatic PAD often remains undiagnosed, opportunities for secondary prevention are missed in primary care. Therefore, there is a clinical need of early detection of asymptomatic PAD and to initiate the appropriate preventive treatment. United States preventive services task force's recommendation against screening is heavily criticized and expansion of the evidence base for PAD screening is recommended in 2011 in a focussed update of the guidelines. This study aims to determine the value of PAD screening using ankle brachial index test in high risk individuals using decision analytic modelling. **METHODS:** A Markov model was developed to evaluate the cost effectiveness of selective PAD screening in high risk individuals followed by preventive treatment compared to no screening and no preventive treatment. The analysis was conducted from the societal perspective using a lifetime time horizon. To address the parameter uncertainty, probabilistic sensitivity analysis was performed. **RESULTS:** Screening and preventive treatment of identified PAD patients with low dose aspirin is a dominant strategy producing higher mean quality adjusted life years per patient for a lower lifetime cost. The cost effectiveness acceptability curves show that 100% simulations favour screening followed by preventive treatment at a willingness to pay threshold of 400 Euros. **CONCLUSIONS:** This decision analysis suggests that the targeted screening and secondary prevention of cardiovascular events in the identified patients, is a highly cost effective public health intervention. This study results may provide one of the building blocks of evidence expansion for advocating PAD screening and to promote its more widespread use to detect and treat PAD patients.

PCV96

COST-EFFECTIVENESS OF INCREASING STATIN ADHERENCE FOR PRIMARY AND SECONDARY PREVENTION IN COMMUNITY PHARMACIES

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OBJECTIVES: Therapy persistence is important to achieve optimal clinical benefits of statin therapy. The aim of this study was to determine the cost-effectiveness of pharmaceutical care in community pharmacies, aimed to increase persistence with statin therapy for both primary and secondary prevention of cardiovascular events (CVEs). **METHODS:** The effectiveness of the Dutch pharmaceutical care program MeMO on improving statin therapy persistence was measured in 500 patients and compared to 502 control patients. Time-investments of the program were also collected. Markov models with lifelong time-horizons were developed to estimate the influence of the program on CVEs: stroke, myocardial infarction (MI), revascularization and mortality. The efficacy of statins, taken from large clinical trials in primary and secondary prevention, were adjusted for therapy persistence. A Dutch health care provider's perspective was adopted for the analysis and probabilistic sensitivity analyses were performed. **RESULTS:** Patients in the MeMO program had a lower risk for non-persistence, RR = 0.50 (0.40-0.63), the effect was similar in primary and secondary prevention. In a cohort of 1,000 patients, 60% of whom had a history of CVE, the MeMO program resulted in a reduction of 8 non-fatal strokes, 2 fatal strokes, 16 non-fatal MIs, 7 fatal MIs and 14 revascularizations. Additional medication, disease management and intervention costs in the MeMO program were €375,000; the cost-savings due to reduced CVEs were €450,000. Thus, the MeMO program resulted in 83 quality-adjusted life-years (QALYs) gained and cost-savings of €75,000. Clinical benefits and cost-savings were highest in the secondary prevention population. **CONCLUSIONS:** Pharmaceutical care in community pharmacies can improve statin therapy persistence, resulting in more optimal prevention of CVEs. The MeMO program resulted in considerable clinical benefits and overall cost-savings. Persistence and adherence improving programs in community pharmacies may provide good value for money and health care insurers should consider reimbursing these activities in The Netherlands.

PCV97

COST-EFFECTIVENESS ANALYSIS OF IVABRADINE IN CHRONIC HEART FAILURE IN THE POLISH SETTING

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OBJECTIVES: To estimate cost-effectiveness of ivabradine used in treatment of chronic heart failure in Poland, using model based on individual patient data from pivotal SHIFT trial adapted using contemporary real-life epidemiology, treatment pattern and cost country-specific data. **METHODS:** Economic model based on SHIFT trial was originally developed for the UK setting and published. Based on the model, in November 2012 NICE gave its positive guidance for the analysed technology in line with EMA registered indication, acknowledging a range of conservative assumptions. Current study utilizes the NICE model populated with most recently published local data. General mortality was estimated from Polish life tables for the year 2010. Unit cost and expected rate of hospitalizations on standard treatment was based on publication in Polish Heart Journal. Standard treatment cost was based on official listing of reimbursed drugs. Average cost of ivabradine (5mg and 7.5mg, 56 tabs) was based on popular drug database (Kamsoft, April 2013). Exchange rate of National Bank of Poland 1 EUR=4.1759 PLN was applied (May 2013). **RESULTS:** At current pharmacy price (55.60 EUR / 56 tabs), incremental cost-utility ratio for ivabradine on top of standard treatment vs standard treatment alone is estimated at 10 230 EUR / QALY, well below the official cost-effectiveness threshold defined at 3*DGP *per capita* (25 336 EUR). Sensitivity analysis revealed that in order to exceed the cost-effectiveness threshold, price would have to be increased to 113.60 EUR (+104%). **CONCLUSIONS:** Conservative analysis shows that ivabradine used on top of standard treatment (ACE inhibitor, beta-blocker, MR antagonist, ±diuretics) in