A491

cost savings at 3 years is estimated to be 11.671€ per patient. **CONCLUSIONS:** The use of the GORE® PROPATEN® Vascular Graft for infrapopliteal bypass in the PAD patient population represents a safe, clinically effective, and cost-saving alternative to standard ePTFE vascular grafts.

PCV105

PHARMACOECONOMIC ANALYSIS OF ROSUVASTATIN USE IN PATIENTS WITH HYPERCHOLESTEROLEMIA IN THE HEALTH CARE OF BELARUS

Kozhanova I¹, Romanova II¹, Gavrilenko L¹, Sachek M²

¹Belarusian State Medical University, Minsk, Belarus, ²The Belarusian Center for Medical Technologies, Computer Systems, Administration and Management of Health, Minsk, Belarus

OBJECTIVES: Pharmacoeconomic analysis of rosuvastatin use in patients with hypercholesterolemia in the health care of Belarus has been performed to determine economic advisability of its applying in Belarus. As there is own production of statins (generics of lovastatin, atorvastatin and simvastatin) in Belarus, the insclusion of new statin (rosuvastatin) in the clinical protocols requires pharmacoeconomic study. METHODS: Overview of statins available in Belarus has been conducted. Equivalent effective dose to achieve target of low density lipoprotein cholesterol (CH-LPLD) values were established on the basis of published data. Costminimization analysis has been used. Model "decision tree" to achieve the target CH-LPLD values has been built on the basis of STELLAR trial. Statin doses required to achieve the target CH-LPLD values have been calculated. The costs of achieving the target CH-LPLD values have been evaluated. The cost of each statins treating during the year has been calculated. RESULTS: The highest cost has been obtained for the equivalent dose of lova statin (\$ 0.35) compared with atorva statin (\$ 0.31) and simvastatin (\$ 0.28) manufactured in Belarus. Average price rosuvastatin (Merten ®) was comparable to the cost (\$ 0.21) of Belarusian generics. The average cost of achieving the target CH-LPLD level was the lowest in the case of rosuvastatin - \$ 170 compared with atorvastatin (\$ 200) and simvastatin (\$ 286) considering available statins of all manufacturers. Due to rosuvastatin's lower effective dosage the costs of the one-year treatment with rosuvastatin is lower (on average 94 \$) than with atorvastatin (all manufacturers - \$ 100) and simvastatin (202 \$). CONCLUSIONS: The study has demonstrated pharmacoeconomic acceptability of rosuvastatin use in the health care of Belarus.

PCV106

COST-UTILITY ANALYSIS OF HYPERTENSIVE TREATMENT WITH INDAPAMIDE AND AMLODIPINE SINGLE-PILL COMBINATION IN THE POLISH SETTING

Stawowczyk E1, Holko P1, Kawalec P2, Borowiec L3, Filipiak KJ4

¹Centrum HTA Sp z o. o. Sp. komandytowa, Kraków, Poland, ²Jagiellonian University Medical College, Krakow, Poland, ³Medical Department, Servier Poland Ltd, Warsaw, Poland, ⁴1st Chair and Department of Cardiology, Medical University of Warsaw, Warsaw, Poland

OBJECTIVES: To assess cost-effectiveness of indapamide 1.5 mg +amlodipine 5/10 mg single-pill combination (SPC) compared with free combination (FC), in the Polish setting. METHODS: A Markov cohort simulation model was used. Results of meta-analysis by Gupta et al show a difference in patients' compliance between SPC and FC. Better compliance results in lower systolic blood pressure, which influences risk of cardiovascular events. Hence, compliance is associated with life expectancy and quality of life. Cardiovascular disease risks were based on the Framingham risk equations. Life-time horizon, Polish public payer perspective and patient perspective were applied. Indapamide/amlodipine SPC cost is based on average pharmacy prices reported in April 2014 (18.13PLN and 19.75PLN respectively for 1.5+5mg and 1.5+10mg /30 tabs); 30% patient copayment was assumed. Cost of FC was calculated as an average cost of reimbursed indapamide and amlodipine products in corresponding doses. All costs present 2014 values, and are expressed in Polish zloty (PLN). Costs and effects were discounted with 5% and 3.5% rates. $\mbox{\bf RESULTS:}$ Indapamide/amlodipine SPC compared with FC generates additional life years (LYs) and quality adjusted life years (QALYs), and is highly cost-effective from public payer perspective and dominant from patient perspective. Difference between SPC and FC in LYs and QALYs was: 0.007960 and 0.020809. Difference in total costs from public payer perspective and from patient perspective was 113.14PLN (27.07EUR) and -211.31PLN (-50.56 EUR). ICUR from public payer perspective was 5,437PLN/QALY (1,301EUR/QALY). At prices +199% vs the base-case, SPC remains a cost-effective technology from public payer perspective according to the legally defined CE threshold (111,381PLN/QALY=26,653EUR/ QALY). At prices -9.9% vs base-case, SPC is a dominant/cost saving technology vs the FC comparator. **CONCLUSIONS:** From public payer perspective, indapamide/ amlodipine SPC compared with FC is a highly cost-effective treatment option for hypertensive patients in contemporary Polish setting. From patient perspective, SPC is a dominant technology.

PCV107

COST-EFFECTIVENESS OF LDL-P-GUIDED STATIN THERAPY

 $\underline{Folse\ HJ}^1$, Rengarajan B^1 , Goswami D^1 , Budoff M^2 , Kahn R^3

¹Evidera, San Francisco, CA, USA, ²Los Angeles Biomedical Research Institute, Torrance, CA, USA, ³University of North Carolina, Chapel Hill, NC, USA

OBJECTIVES: Numerous trials have shown that lowering LDL cholesterol (LDL-C) reduces CVD events; however, at any LDL-C level, residual risk remains. LDL particle concentration (LDL-P) may be a better predictor of events, but no studies have evaluated its cost-effectiveness. We used the Archimedes model to evaluate the cost-effectiveness of using LDL-C or LDL-P in preventing cardiovascular disease in dyslipidemic patients. METHODS: Archimedes is a highly detailed, large-scale simulation model of physiology, disease and health care systems. We created a simulated population of 1,000,000 individuals age 20-84 reflective of real subjects in the NHANES dataset. Because NHANES does not contain LDL-P values, they were imputed maintaining covariance with other biomarkers. The study had three arms: •Control: subjects evaluated for therapy for elevated LDL-C and treated with statins to LDL-C goals outlined in ATP-III; •LDL-P Alone: subjects evaluated and treated based solely on their LDL-P values; •Dual Arm: subjects evaluated

by LDL-C but treated to both LDL-C and LPL-P recommended goals. **RESULTS**: In the general population, the costs per quality-adjusted life year (QALY) associated with the use of LDL-P alone were \$76,052 at 5 years and \$8,913 at 20 years and with the use of both markers were \$142,825 at 5 years and \$25,505 at 20 years. In high-risk subpopulations, the use of LDL-P alone was cost-saving at 5 years; whereas the cost per QALY for the use of both markers was \$14,250 at 5 years and \$859 at 20 years for high-risk dyslipidemics, \$19,192 at 5 years and \$649 at 20 years for diabetics, and \$9,030 at 5 years and \$7,268 at 20 years for patients with prior CHD. **CONCLUSIONS**: Utilizing LDL-P to guide statin therapy is cost-effective in the long term for the general population, and cost-saving or cost-effective in the short term for high-risk patients.

PCV108

COST EFFECTIVENESS ANALYSIS OF TICAGRELOR VERSUS GENERIC CLOPIDOGREL IN THE TREATMENT OF PATIENTS WITH ACUTE CORONARY SYNDROME IN SPAIN

Capel M¹, Lopez-Sendon JL², Heras M³, Carrera FJ⁴, Brosa M⁵

¹AstraZeneca, Madrid, Spain, ²Hospital La Paz, Madrid, Spain, ³Clinic Hospital, Barcelona, Spain, ⁴Dr. Moliner Hospital, Valencia, Spain, ⁵Oblikue Consulting, Barcelona, Spain

OBJECTIVES: The aim of this study was to evaluate the long-term cost effectiveness of ticagrelor + aspirin versus clopidogrel + aspirin in patients with acute coronary syndrome (ACS) treated for 12 months in Spain. METHODS: The cost effective ness model consisted of a decision tree (1st year) based on the PLATO study and a long-term Markov model (2nd year onwards). This allowed estimation of cardiovascular events (death, myocardial infarction and non-fatal stroke), survival, health costs, and health related quality of life. A life time horizon was applied. The daily drug cost was ϵ 0.60 and ϵ 2.96 for generic clopidogrel and ticagrelor, respectively. Spanish unit costs and life tables were used, outcomes and costs were discounted at 3%. A sensitivity analysis across subgroups was carried out, and probabilistic sensitivity analysis was used to validate the robustness of the model. RESULTS: Ticagrelor compared to clopidogrel was associated with a gain of 0.1586 life years and 0.1363 years of quality-adjusted life years (QALY), with an incremental cost of ε 596. The incremental cost per life year and per QALY gained was ε 3,760 and ε 4,374, respectively. The probabilistic sensitivity analysis showed that ticagrelor was costeffective versus clopidogrel in >99 % of the simulations given a willingness-to-pay threshold of € 15,000/QALY. The results were consistent across different subgroups of ACS patients. CONCLUSIONS: Ticagrelor + aspirin for 12 months is a cost effective treatment compared to generic clopidogrel + aspirin in patients with ACS treated invasively or conservatively, based on the findings of the PLATO study and Spanish health care costs.

PCV109

COST-UTILITY ANALYSIS OF CAROTID ARTERY STENTING VERSUS ENDARTERECTOMY FOR SYMPTOMATIC CAROTID STENOSIS PATIENTS

Oh SH1, You JH1, Lee JY2, Park JJ1, Shin S3

¹National Evidence-based Healthcare Collaborating Agency, Seoul, South Korea, ²National Evidence-based Healthcare Collaborating Agency (NECA), Seoul, South Korea, ³National Evidence-based healthcare Collaborating Agency, Seoul, South Korea

OBJECTIVES: This study was conducted to determine the cost-effectiveness of carotid Artery stenting (CAS) versus carotid endarterectomy (CEA) in patients with symptomatic carotid stenosis (more than 50% stenosis) in Korean health care system perspective. METHODS: We performed a cost-utility analysis. Costs were estimated from retrospective chart review (CAS=346, CEA=331), health insurance claims data, and other national resources and expressed in 2013 KRW. Transition probabilities were estimated from retrospective chart and systematic review. Health utility index was assessed for general population using Time Trade Off (TTO) with health scenario. We used a Markov model to project 15-year costs and quality-adjusted life years (QALYs) for the 2 treatment groups. **RESULTS:** In the base case analysis, CAS produced 6.49 QALYs, compared with 6.71 QALYs for CEA. The incremental cost of stenting was 1,691,740 KRW. In the base case analysis, CEA for patients with symptomatic stenosis had a greater benefit than CAS, with lower costs. In subgroup for patients with stenosis more than 70% or patient with over 80 years old, CAS was cost-effective. Sensitivity analyses showed that the major stroke or mortality influenced the results. However the results were consistent with the base analysis. CONCLUSIONS: Under the current circumstances in Korea, CEA was dominated by CEA in symptomatic steonsis. Therefore we concluded that CEA would be cost-effective intervention for carotid stenosis. To be economically competitive, the clinical effectiveness such as mortality and major stroke rates of CAS must be at least equivalent if not less than those of CEA.

PCV110

BURDEN OF HYPERLIPIDEMIA RESULTING FROM PRODUCTIVITY LOSS - ESTIMATES FROM POPULATION-BASED REGISTER DATA IN SWEDEN

Banefelt J¹, Hallberg S¹, <u>Gandra SR</u>², Mesterton J¹, Fox KM³, Paoli CJ², Johansson G⁴, Levin LÅ⁵, Sobocki P⁶

¹Quantify Research, Stockholm, Sweden, ²Amgen, Inc., Thousand Oaks, CA, USA, ³Strategic Healthcare Solutions, LLC, Monkton, MD, USA, ⁴Uppsala University, Uppsala, Sweden, ⁵Linköping University, Linköping, Sweden, ⁶IMS Health, Stockholm, Sweden

OBJECTIVES: To estimate productivity loss and associated indirect costs in working age patients treated for hyperlipidemia. METHODS: A retrospective population based cohort study was conducted using Swedish electronic medical records linked to national health registers and the Social Insurance Register. Patients were included based on a prescription of lipid-lowering therapy between January 1,2006 and December 31,2011 and followed until December 31,2012 for estimation of productivity loss and cost outcomes. Patients were stratified into three cohorts based on cardiovascular (CV) risk level. RESULTS: Total mean days lost, measured as the sum of net sick leave and net disability pension days, during the one-year period following study inclusion was highest in the CV event history cohort (n=6,881; 159 days), followed by the CV risk equivalent (RE) cohort (n=3,226; 131 days) and the low/