per year. CHD may adversely impact on the Quality of Life. The objectives of the study were to describe Health-Related Quality of Life (HRQOL) in subjects with CHD and to compare their health state with the health state of subjects without CHD. METHODS: We selected subjects with CHD (Cases) from a representative sample of the Italian general population aged from 40 to 79 years, enrolled in a population based naturalistic prospective survey. We matched each of them by age and sex with subjects without CHD disease (Controls). EuroQol (EQ-5D) was used to evaluate HRQOL. We used Chi Square Test to evaluate differences in the five dimensions of the EQ-profile between the two groups. Paired sample T test was used to evaluate differences in EQ-VAS. RESULTS: We analyzed two groups of 98 subjects per group. The mean age was 64.7 (SD 8.6) years, (69.4%) were male. More problems were reported in cases than in controls in the mobility dimension, usual activities, and self care and anxiety/depression dimensions. These differences proved statistically significant. Whereas in pain/discomfort domain there was no significant difference between the two groups. Mean values of the visual analogue scale assessing global health status indicated by case and control were 68.1 and 66.94, respectively (P = 0.005). CONCLUSION: The study, comparing subjects of the same age and sex with and without CHD, suggests that the presence of CHD is associated with higher problems in HR.

PORTUGUESE ACTIVE POPULATION HEALTH RELATED QUALITY OF LIFE RESULTS USING THE SF-6D

Ferreira LN¹, Ferreira PL²
¹University of Algarve, Faro, Algarve, Portugal; ²University of Coimbra, Coimbra, Portugal

OBJECTIVES: This study aims to describe the health related quality of life (HRQOL) of the Portuguese population and investigates sociodemographic differences. METHODS: Subjects randomly selected from the Portuguese active population (n = 2459) were assessed using the SF-36, a generic measure of HRQOL, which was converted into the preference-based SF-6D, following the Brazier algorithm. Although the sample was randomly selected, it differed slightly from the whole population. In order to correct this, post-stratified statically techniques were used to weight the initial results by gender and age, according to the population values. RESULTS: Mean global utility SF-6D scores were 0.70, and ranged from 0.73 (18–24 years) to 0.63 (55–64 years). The mean utility scores were 0.17 lower in the lower educational level than in the higher educational level (p < 0.000). Women, people living in rural areas and the elderly reported lower levels of utility scores. Nonparametric tests showed that health utility values were significantly related to employment (p < 0.000): the unskilled manual workers (0.68) reported lower utility values than the non-manual workers (0.74). For different diseases mean utility scores ranged from 0.66 (hepatitis) to 0.56 (stroke). This study was able to achieve normative data by age and gender for the SF-6D. Using QALYs as outcome measures, the difference between unskilled manual workers and non-manual workers would be equivalent to a difference of 4902€ in annual income. In this line of thinking, the difference between lower educational level and higher educational level would be equivalent to a difference of 13,889€ in annual income. CONCLUSION: We conclude that the SF-6D is an efficient tool for measuring the HRQOL in the community, so that different population groups can be compared. The preference-based utility measure used seems to adequately discriminate across different sociodemographic differences, showing that the HRQOL varies greatly between sociodemographic groups.

RECENT TREND IN MANAGEMENT OF HYPERCHOLESTEROLEMIA AND GOAL ATTAINMENT

Goettsch WG
PHARMO Institute for Drug Outcomes Research, Utrecht, The Netherlands

OBJECTIVES: To evaluate current lipid management practice in The Netherlands and estimate the impact of new guidelines of the European Society of Cardiology (ESC) on cholesterol goal attainment. METHODS: Data were obtained from a sample of the PHARMO system that includes complete medication, hospital admission and clinical lab assessment data of 80,000 Dutch residents. Patients starting lipid lowering drug (LLD) therapy between 2002–2004 who had a baseline TC measurement in the six months prior to initiation of therapy and had at least one TC measurement after the start of therapy were included. Goal attainment was compared using the ESC 1998 and ESC 2003 guidelines. For both guidelines goal attainment was in general defined as TC <5 mmol/l during LLD treatment. However, in the ESC 2003 guidelines goal attainment was defined as TC <4.5 mmol/l during LLD treatment for patients with cardiovascular disease or diabetes. Doses of statins were expressed in equipotencies based on TC lowering capabilities. RESULTS: The study sample comprised of 623 patients (43% females). Most patients (83%) were initiated on statin monotherapy of at least an equipotent dose of four (simvastatin 20mg or equipotent statin). Overall TC goal attainment rate based on 1998 guidelines was 59% and based on new ESC guidelines was 49%. Goal attainment in patients with cardiovascular disease or diabetes changed from 69% to 49% based on old and new guidelines respectively. Our results also indicated that persistent statin use during follow-up increased goal attainment (54% versus 44% in not persistent patients using new ESC guidelines). CONCLUSIONS: Though lipid management in recent years has become more aggressive, achievement of cholesterol goals based on the new ESC guidelines is relatively low. Therefore there is a need for highly effective lipid lowering therapies that are also well tolerated in order to achieve sufficient persistence.

IMPACT OF NEW EUROPEAN (ESC 2003) GUIDELINES ON TREATMENT OF HYPERCHOLESTEROLEMIA IN DAILY PRACTICE

Goettsch WG
PHARMO Institute for Drug Outcomes Research, Utrecht, The Netherlands

OBJECTIVES: To compare lipid management and reductions in total cholesterol (TC) levels among patients initiated on lipid lowering drugs (LLD) in recent years (2002–2004) to those initiated in earlier years (1991–2001). METHODS: Data were obtained from a sample of the PHARMO system that includes complete medication, hospital admission and clinical lab assessment data of 80,000 Dutch residents. Patients starting LLD therapy and having a baseline TC measurement within six months prior to therapy initiation as well as at least one measurement after the start of therapy were included in two study cohorts. One cohort included patients who initiated therapy in 2002–2004 and another that initiated therapy in 1991–2001. Goal attainment was defined as TC <5 mmol/l during LLD treatment according to Dutch guidelines. Statin dosage was expressed in equipotencies based on TC lowering capabilities. RESULTS: Patients with cholesterol levels <6mmol/l were more likely to be treated in the period 2002–2004 than in the period 1991–2001 (27% versus 15% of all patients, respectively). Furthermore, equipotent dose at the start of statin monotherapy gradually
increased over the years; in 1996 13.7% of the patients started with at least an equipotent dose of four (simvastatin 20 mg or equipotent) while in 2004 88.4% of all patients started on at least an equipotent dose of four. Goal attainment increased from 42% in years prior to 2001 to 59% in 2002–2004 and was high in patients with cardiovascular disease and diabetes (43% versus 69%). CONCLUSIONS: Although in recent years aggressive statin treatment and lower baseline TC levels led to higher goal attainment 41% of the patients still did not reach goal. Therefore even more effective and well tolerated lipid lowering therapies seem to be required.

PCV44
COST-EFFECTIVENESS OF ROSUVASTATIN IN THE PREVENTION OF ISCHEMIC HEART DISEASE IN PORTUGAL
Gouveia-Pinto C1, Carrageta M2, Silva-Miguel L3
1Instituto Superior de Economia e Gestão, Technical University of Lisbon, Lisbon, Portugal; 2Garcia de Orta Hospital, Almada, Portugal; 3Research Centre on the Portuguese Economy—CISEP, Lisbon, Portugal

OBJECTIVES: To analyse the cost-effectiveness of Rosuvastatin compared to Atorvastatin in the treatment of hypercholesterolemia and prevention of ischemic heart disease (IHD) in Portugal. METHODS: A probabilistic Markov model was developed to analyse the costs and consequences of lifetime treatment with Rosuvastatin and Atorvastatin. For this purpose, results from head-to-head, randomised, double-blind trials evaluating low-density lipoprotein (LDL) changes and from a meta-analysis defining the relationship between LDL levels and fatal and non-fatal IHD events were combined. Incidence of myocardial infarction was derived from a nine-year Portuguese observational study. Death rates due to IHD and other causes were obtained from official data. Resource use in the treatment of MI was estimated by a Delphi panel of 8 Portuguese cardiologists with at least 15 years of clinical practice. Calculation of costs was done on both the societal and patients’ perspectives. Eligible population was defined as untreated individuals over 35 years of age with LDL above 160 mg/dl. RESULTS: Rosuvastatin slightly increases life expectancy: 5.64 days per patient and 8832 years for the eligible population. Although the drug is more expensive, economic analysis shows that Rosuvastatin is cost saving. It saves €105 or €57 per patient on the society’s or the patients’ perspective, respectively. Therefore, Rosuvastatin dominates the alternative having a cost-effectiveness ratio of €67672 and –€3682 per life year according to the society’s or the patients’ perspectives. In the 10,000 simulations carried out Rosuvastatin was always more efficacious than Atorvastatin, being cost saving in 56.05% of the cases. If the willingness to pay is higher than €162 (society) or €98 (patients) Rosuvastatin is cost-effective in all cases. CONCLUSION: Rosuvastatin dominates Atorvastatin in the prevention of IHD in Portugal.

PCV45
THE ECONOMIC ASSESSMENT OF SWITCHING TO DUAL INHIBITION CHOLESTEROL LOWERING THERAPY
IN FINLAND
Simonen H1, Alemo E2, Jouslahti P1, Davies G1, Kuja H1, Yin D1, Cook J1
1University of Helsinki, Mannerheimintie, Helsinki, Finland; 2Merck and Co, Whitehouse Station, NJ, USA; 3Merck and Co, Blue Bell, PA, USA; 4MSD Finland, Keilaranta, Espoo, Finland

While treatment guidelines recommend lowering cholesterol to target levels, many remain above recommended goal (TC >4.5 mmol/dl for CHD and diabetic patients). In a clinical trial patients switched from statin monotherapy to Ezetimibe/Simvastatin (dual inhibition therapy) experienced an additional 27.5% and an 18.8% reduction in LDL-C and TC, respectively. CONCLUSION: Assess cost-effectiveness of switching patients to Ezetimibe/Simvastatin (followed by titration on Ezetimibe/Simvastatin) versus an atorvastatin dose titration strategy in CHD/diabetic patients who are not at goal with atorvastatin monotherapy. METHODS: Previously published decision-analytic model was used to project lifetime costs and benefits of lipid therapy. Clinical trial data were used in the model to estimate TC reductions for different treatment strategies. The effect of TC reductions on CHD event rates was estimated using Framingham equations and Finnish statistics on nonCHD-related mortality. Direct costs of CHD events in Finland [Health 2000 Survey data at the 2003 price level and also from the literature], Finnish prices for atorvastatin and Ezetimibe/Simvastatin and age specific quality-of-life weights were used to project cost/QALY. The model was run for a sample of Finnish CHD/diabetic patients (N = 25) that participated in the Finnrisk 2002 study and were not at TC goal while on therapy with atorvastatin and having data on all Framingham risk factors. RESULTS: The mean age of the study sample was 60.4 (SD 7.7) years, 60% male, lipid profile on atorvastatin TC 5.4 (SD 0.9) mmol/L, HDL-C 1.3 (SD 0.3) mmol/L, triglycerides 1.8 (SD1.1) mmol/L. Switching to Ezetimibe/Simvastatin (followed by 11% titration on Ezetimibe/Simvastatin) compared to atorvastatin titration (11%) is projected to increase undiscounted life expectancy by 0.75 years for CHD/diabetic patients with a discounted incremental cost/QALY of €972. CONCLUSION: Switching to dual inhibition therapy, (Ezetimibe/Simvastatin) in CHD/diabetic patients not at goal on atorvastatin is projected to be a cost-effective alternative to atorvastatin titration.

PCV46
COST-ANALYSIS OF HYPERCHOLESTEROLEMIA TREATMENTS WITHIN THE SLOVAK PHARMACEUTICAL MARKET
Tesar T1, Folan V1, Tomek D2, Vlasek M1
1Faculty of Pharmacy, Comenius University, Bratislava, Slovak Republic; 2Health Insurance fund Apollo, Bratislava, Slovak Republic

OBJECTIVES: The aim of this study was to collect comparable and reliable data on the lipid lowering therapy in Slovakia during the period 1996–2004. The special interest was paid to the trend of the statin and fibrate usages. METHODS: Data of wholesalers (following ATC/DDD), who are legally obliged provide this information to the Slovak Institute for Drug Control, was used for the analysis. The results were expressed in the numbers of the packages, finance units (€) and defined daily doses per 1000 inhabitants per day (DDD). RESULTS: The collected data showed large increases in hypolipidemic consumption from 1996 to 2004 in term of DDD (in 1996 (4.18), in 2000 (12.79) and in 2004 (31.50)). A significant increase in statin consumption (in 1996 (1.97), in 2000 (6.27) and in 2004 (22.33)) and slight increase in fibrate consumption (in 1996 (3.59), in 2000 (6.38) and in 2004 (9.13)) in term of DDD can be seen from this analysis. From the reimbursement point of view, simvastatin (in 2000 was reimbursed at the level of €0.84 per DDD, in 2004 the reimbursement level was at €0.24), fluvastatin (in 2000 was reimbursed at the level of €0.75 per DDD, in 2004 the reimbursement level was at €0.47), atorvastatin (in 2000 was reimbursed at the level of €0.89 per DDD, in 2004 the reimbursement level was at €0.51). Financial expenditures were for statins (in 1996 (€989,000), in 2000 (€10,335,000) and in 2004 (€13,043,000)) and for fibrates (in 1996 (€2,743,000), in 2000 (€4,546,000) and in 2004 (€4,478,000)). CONCLUSIONS: Usage of generic drugs for the treatment of hypercholesterolemia brought about a dramatic increase in hypolipidemic consumption and the financial expen-