could be a potential link between lipid metabolism and liver diseases, which necessitates further investigation.

PCV42

STATIN USE AND RISK OF DEVELOPING DIABETES: A NETWORK META-
ANALYSIS

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OBJECTIVES: Studies have shown that statins may induce diabetes in non-diabetic cardiovascular disease patients, as class effect. It is uncertain if any particular statin is more likely to have greater risk of developing diabetes; only direct and indirect comparison of treatment effects may clarify this uncertainty. We had previously conducted a systematic literature review to estimate the relative likelihood of statins vs. placebo or other agents. This network meta-analysis (NMA) was conducted to rank the treatments according to their risk of developing diabetes.

METHODS: We searched databases like Embase, PubMed, and Cochrane. Randomized controlled trials that studied one of the statins and reported incidence of diabetes as an outcome were considered for inclusion. Data synthesis was performed by pairwise meta-analysis and NMA using STATA® with routines available from www.mtm.uoi.gr.

RESULTS: The included trials were reviewed in this analysis, in which 78,677 patients had been randomized. The follow-up ranged from two to nine years among the studies. As previously reported the pair-wise meta-analysis showed that statins significantly increased the odds of developing diabetes compared to placebo without considerable heterogeneity [OR 1.15, 95% CI 1.06, 1.25; p = 0.006, I²=25%]. From the present NMA, the drug with highest odds for developing diabetes was simvastatin 80mg [OR 5.24, 95% credible intervals (CrI) 1.28, 21.46], followed by simvastatin 20mg [OR 4.89, 95% CrI 1.20, 17.96; treatment effect: 1.29, 95% CrI 1.09, 1.52; p = 0.002], atorvastatin 10mg and pravastatin did not significantly increase the risk of diabetes in the network meta-analysis. CONCLUSIONS: To the best of our knowledge, this is the first study exploring this correlation. The NMA shows the risk of developing diabetes to be higher with simvastatin. However, this should be confirmed from observational studies using a large safety database.

PCV43

COSTS AND OUTCOMES OF PATIENTS ADMITTED FOR A CARDIOVASCULAR ISCHEMIC DISEASE IN A LARGE COMMUNITY SETTING OF 2,989,512 SUBJECTS OF THE ITALIAN NATIONAL HEALTH SERVICE

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OBJECTIVES: To assess in a community setting the clinical characteristics, the outcomes and the related costs of patients admitted for an acute coronary syndrome (ACS) or a stroke/TIA (CVD) or a peripheral artery disease (PAD).

METHODS: From the ARNO Observatory we carried out a record linkage analysis of discharge records for the CVD 10,440 (ACS) or a stroke/TIA (CVD) or a peripheral artery disease (PAD).

RESULTS: Of the 2,989,512 subjects, 6,226 (2.1‰) were hospitalized for ACS, 9,939 (3.3‰) for a CVD and 1,048 (0.4‰) for PAD. Patients admitted for ACS were significantly older and of female gender than patients with ACS or PAD [age 73 ± 13 vs 71 ± 13 vs 71 ± 11; p < 0.001] (gender 50.6% vs 35.1% vs 51.9%, p < 0.001). In-hospital mortality rates were 6.9%, 6.4% and 1.0% [p < 0.001] respectively for CVD, ACS and PAD. Over the 1-year follow-up, 63.3% of the patients with ACS needed to be hospitalized for ACS, 9,939 (3.3‰) for a CVD and 1,048 (0.4‰) for PAD. Patients admitted for ACS, CVD, and PAD had a total cost of $19,045,453 with the largest proportion of costs from general ward, ICU and operative-suite time (approx. 30%, 21%, and 20% respectively). One year follow-up revealed $93,958 or 0.5% of total costs. Increasing the proportion of cases receiving clevidipine to 5% for both procedures increased drug acquisition costs by $13,005 and decreased HRU-related costs by $48,439 for a net decrease in costs of $35,434 for one year. CONCLUSIONS: This analysis predicts a net savings with an increase in clevidipine use. In this case the minimal increase in IVAH dosage was cost offset by savings in HRU-related costs resulting from improved outcomes associated with reduced perioperative BP variability.

PCV46

ECONOMIC IMPLICATIONS OF INCREASED UTILIZATION OF 5% ALBUMIN FOR FLUID RESUSCITATION POST-ON-PUMP CARDIAC PROCEDURES IN US HOSPITALS

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OBJECTIVES: Increased perioperative blood pressure (BP) variability in cardiac surgery patients has been associated with adverse outcomes and increased resource utilization (HRU). Clevidipine, an ultrashort-acting, arterial selective calcium channel blocker reduces BP variability and may reduce HRU in this setting. The current model evaluates the one year budget impact of adding clevidipine to an intrave-

nous anesthetic drug (IAD) model of care.

METHODS: A spreadsheet model was developed using specific HRU data from a clevidipine clinical trial (ECLIPSE) in cardiac surgery. Treatment distribution for IVAH agents (clevidipine, nicardipine, nicardipine, and nitroglycerin), case volumes and comparable IVAH dosages were obtained from the Premier Hospital database. Unit costs for IVAH are US Wholesale Acquisition Costs (WAC). Thirty-day event costs were from the published literature. The model inputs may be customized to more accurately represent a given healthcare system. RESULTS: The base case assumed a sample hospital with 468 coronary artery bypass graft (CABG) cases and 322 heart valve (HV) cases annually. Clevidipine usage in the base case scenario was 5% of cases (0.5% use in CABG, 1% in HV). The base case predicts a one year total cost of $19,045,453 with the largest proportion of costs from general ward, ICU and operative-suite time (approx. 30%, 21%, and 20% respectively). One year follow-up revealed $93,958 or 0.5% of total costs. Increasing the proportion of cases receiving clevidipine to 5% for both procedures increased drug acquisition costs by $13,005 and decreased HRU-related costs by $48,439 for a net decrease in costs of $35,434 for one year. CONCLUSIONS: This analysis predicts a net savings with an increase in clevidipine use. In this case the minimal increase in IVAH dose was cost offset by savings in HRU-related costs resulting from improved outcomes associated with reduced perioperative BP variability.

PCV47

EXPECTED COST OF DRUG THERAPY IN PATIENTS WITH ARTERIAL HYPERTENSION, DIABETES MELLITUS AND DYSLIPIDEMIA IN CHILE: A PROBABILISTIC ANALYSIS

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OBJECTIVES: To estimate the expected cost of the pharmaceutical treatment on prevalence of arterial hypertension (AH), diabetes mellitus (DM) and dyslipidemia in the Chilean population, following the recent approval of Drug National Funds. METHODS: The drugs considered in this study and the information about their prevalence in the general population was published by the health ministry of Chile. The cost was estimated using the drug consumption patterns from the national health survey 2009-2010 and from a vector of prices for every drug and their combination of uses, for both public and private health systems through the public market platform and IMS health Chile. 10.000 Montecarlo