

## PCV181

## PILOT ASSESSMENT OF PHARMACEUTICALS BASED ON THE EUNETHTA CORE MODEL FOR RAPID RELATIVE EFFECTIVENESS ASSESSMENT

Sacareau J<sup>1</sup>, Tesar T<sup>2</sup>, D'Andon A<sup>1</sup><sup>1</sup>HAS (French National Authority for Health), SAINT-DENIS LA PLAINE, France, <sup>2</sup>Working group for Pharmacoeconomics, Clinical Outcomes and HTA, Slovak Ministry of Health, Bratislava, Slovak Republic

**OBJECTIVES:** The objective of EUnetHTA is to strengthen the practical application of tools and approaches to cross-border HTA collaboration. Rapid relative effectiveness assessments (REAs) are jointly produced, aiming for efficiency gains and application in a national context. The 5th Rea concerned the assessment of Vorapaxar, indicated in the reduction of thrombotic cardiovascular events in patients with a history of myocardial infarction. **METHODS:** Assessment was done using the HTA Core Model for Rapid REA, developed by EUnetHTA. The project duration was 10 months and consisted of a scoping phase of 4 months, followed by an assessment phase of 6 months after the positive CHMP opinion. The project was coordinated by The Dutch Healthcare Institute. The main author of the report was French national authority for health, with the Ministry of Health of Slovakia as co-author. Six other European agencies were involved as reviewers in the different assessment steps. The marketing authorization holder (MAH) was provided the opportunity to review the report. **RESULTS:** Assessment report included 4 domains: health problem, description of the technology, clinical effectiveness and safety, and has been published on 19/06/2015. Vorapaxar is a selective antagonist of PAR-1 (thrombin receptor platelets). The MAH provided TRA 2°P-TIMI 50 trial to evaluate safety and efficacy of vorapaxar as an add-on therapy : vorapaxar + ASA ± clopidogrel versus ASA ± clopidogrel in subjects with a history of myocardial infarction. The results and experiences of the joint assessment will be provided during the ISPOR congress. Also we will discuss the extent to which national adaptation of the report takes place. **CONCLUSIONS:** HTA agencies have shown that they are able to provide a common assessment, using common guidelines, even within the different processes and reimbursement systems they are using. The joint assessment process is evaluated regularly by the agencies involved. This improves the core model and the procedures.

## PCV182

## REVEALED OPPORTUNISM: HOW PHYSICIANS GAME PRIOR AUTHORIZATION PROTOCOLS UNTIL THEY ARE RESCINDED

Kahan NR<sup>1</sup>, Chinitz D<sup>2</sup>, Waitman D<sup>1</sup><sup>1</sup>Leumit Health Services, Tel-Aviv, Israel, <sup>2</sup>Hebrew University, Jerusalem, Israel

**OBJECTIVES:** Prior authorization (PA) is a managerial technique frequently implemented to curtail use of expensive drugs and to improve drug-prescribing quality. PA requirements may incentivize physicians to document adverse effects (AEs) to drugs, sometimes falsely, to meet eligibility requirements for approval. The objective of this study was to evaluate the effect of a PA requirement on documentation rates of AEs of drugs necessary for approval of more expensive drugs. **METHODS:** We conducted a retrospective analysis of physician electronic-reporting behavior of AEs to angiotensin converting enzyme inhibitors (ACE-Is) before and after revocation of a PA requirement for angiotensin receptor blockers (ARBs) during the years 2004-2013 in an Israeli HMO. Data were stratified by newly treated and patients who had been treated for at least one year. The annual rate of AEs to ACE-Is in treated patients (number of reported cases of AEs per 1000 ACE-I treated patients) was calculated for the five years before and after revocation of the PA constraint. **RESULTS:** 151,845 patients met inclusion criteria of the study. AE rates amongst newly treated patients peaked to 10.0 cases per 1000 patients during 2007 gradually falling to 4.6 after the PA requirement was rescinded (P<0.001). Amongst previously treated patients a fall from 5.4/1000 to 1.8/1000 patients was observed. **CONCLUSIONS:** The PA requirement under investigation was observed to be significantly associated with physician propensity for reporting drug side-effects, possibly erroneously. The decline in incidence of reported side-effects in both subpopulations upon revocation of the PA requirement confirm our suspicion that physicians were incentivized to document side effects to ACE-Is to meet eligibility requirements for approval of ARBs. The risk of gaming behavior in documentation of drug side effects may increase when side effects cannot be substantiated with laboratory tests or diagnostic imaging.

## PCV183

## LIPID MODIFYING THERAPY TREATMENT PATTERNS AND CHOLESTEROL CONTROL AFTER CARDIOVASCULAR EVENTS IN THE UNITED KINGDOM

Danese M<sup>1</sup>, Gleeson M<sup>1</sup>, Kutikova L<sup>2</sup>, Griffiths R<sup>1</sup>, Khunti K<sup>3</sup>, Kondapally Seshasai SR<sup>4</sup>, Ray KK<sup>5</sup><sup>1</sup>Outcomes Insights Inc., Westlake Village, CA, USA, <sup>2</sup>Amgen (Europe) GmbH, Zug, Switzerland, <sup>3</sup>University of Leicester, Leicester, UK, <sup>4</sup>St George's, University of London, London, UK, <sup>5</sup>School of Public Health, Imperial College London, London, UK

**OBJECTIVES:** To estimate real-world utilisation of lipid modifying therapy (LMT) and low-density lipoprotein cholesterol (LDL-C) goal attainment in the United Kingdom. **METHODS:** Individuals with their first and, if present, repeated cardiovascular (CV) related hospitalisations were identified from 2006-2012 Clinical Practice Research Datalink and Hospital Episode Statistics data. Patients >18 years receiving LMT within 180 days before the CV (index) event were followed for 12 months. Patient cohorts were classified as CV Low/Moderate Risk, CV High Risk, and CV Event History. Adherence (medication possession ratio), persistence, switching, and therapy augmentation were calculated for statins, ezetimibe and fibrates during the follow-up period. Attainment of the recommended LDL-C target of <1.8 mmol/L was assessed for risk groups at the index and 12 months afterward. **RESULTS:** Across cohorts, 97% were receiving statins before or at index. Moderate intensity statins were used the most. Medication possession ratio ranged from 0.76-0.79 for statins, 0.72-0.79 for ezetimibe, and 0.58-0.73 for fibrate users. Persistence at 12 months was 51%-52% for statin, 40%-50% for ezetimibe, and 36%-45% for fibrate users. Approximately 2% of statin users switched to new medications, compared

to 11%-16% of ezetimibe users, and 11%-19% of fibrate users. Nearly 4% of statin users augmented their regimen during the year, compared with 56%-61% of ezetimibe and 38%-51% of fibrate users. The proportion of patients not meeting the LDL-C target was 71% and 69% in the CV High Risk and CV Event History cohorts at index, respectively, and 65% for both at 12 months. Approximately 60% of diabetic patients of CV High Risk cohort did not meet LDL-C target at both index and 12 months. **CONCLUSIONS:** Adherence to LMT after CV events was best for statins. Patients receiving fibrates or ezetimibe had higher rates of switching or augmentation. LDL-C goal attainment is low, representing a substantial unmet medical need.

## MENTAL HEALTH – Clinical Outcomes Studies

## PMH1

## DOES USE OF ANTIPSYCHOTICS INCREASE THE RISK OF DEATH: A SYSTEMATIC REVIEW AND META-ANALYSIS OF OBSERVATIONAL STUDIES

Hsu W<sup>1</sup>, Rego LS<sup>2</sup>, Esmaily-Fard A<sup>3</sup>, Lee C<sup>4</sup><sup>1</sup>National Taiwan University Hospital, Taipei City, Taiwan, <sup>2</sup>Zeus Quimica, Lda., Porto, Portugal, <sup>3</sup>The University of Texas MD Anderson Cancer Center, Houston, TX, USA, <sup>4</sup>National Taiwan University Hospital, Yunlin Branch, Douliou, Taiwan

**BACKGROUND:** Use of antipsychotic medications has been associated with increased risk of mortality; however, this association remains questionable given conflicting evidence in the literature. **OBJECTIVES:** We conducted a systematic review and meta-analysis of observational studies to determine whether mortality was higher among antipsychotic (AP) users than AP nonusers. **METHODS:** All articles published from 1970 to March 2015 were identified by comprehensively searching PubMed, MEDLINE, and EMBASE without language restrictions. Three reviewers independently extracted study characteristics and indicators of study quality. Random or fixed effects models were used to calculate pooled odds ratios (ORs) and evaluate heterogeneity (I<sup>2</sup>). **RESULTS:** We identified 17 (13 cohort and 4 case-control) eligible studies with 123,116 deaths. Use of APs was associated with increased risk of all-cause mortality [OR 1.38, 95% confidence interval (CI) 1.12-1.69, I<sup>2</sup> = 91.0%] and significantly higher risk of sudden cardiac death [OR 2.24, 95% CI 1.71-2.92, I<sup>2</sup> = 22.8%]. Compared to AP nonusers, the pooled OR for risk of death was 1.49 [95% CI 1.20-1.85, I<sup>2</sup> = 84.3%] with first-generation antipsychotics (FGAs) exposure and 1.50 [95% CI 1.24-1.81, I<sup>2</sup> = 89.3%] with second-generation antipsychotics (SGAs) exposure. Subgroup analysis reported that current users of FGAs were at a higher risk of mortality [OR 1.78, 95% CI 1.67-1.90, I<sup>2</sup> = 0%]. The pooled OR from current use of SGAs was 1.81 [95% CI 1.44-2.28, I<sup>2</sup> = 85.3%]. Use of FGAs and SGAs among elderly patients was associated with a lower risk of death with a pooled OR of 1.13 [95% CI 0.69-1.85, I<sup>2</sup> = 87.1%] and 1.36 [95% CI 0.90-2.05, I<sup>2</sup> = 91.7%], respectively. **CONCLUSIONS:** APs use, especially current users of SGAs, was associated with an increased risk of all-cause mortality. Exposure to APs was associated with a greater increase in sudden cardiac death. We did not observe a significant difference between subgroup analyses of FGAs and SGAs.

## PMH2

## RISK FACTORS FOR DEMENTIA DIAGNOSIS IN GERMAN PRIMARY CARE PRACTICES

Wendschlag A<sup>1</sup>, Jacob L<sup>2</sup>, Kostev K<sup>3</sup>, Bohlken J<sup>4</sup>, Rapp MA<sup>5</sup><sup>1</sup>IMS Health, Frankfurt / Main, Germany, <sup>2</sup>Ecole Normale Supérieure de Lyon, Lyon, France, <sup>3</sup>IMS Health, Frankfurt am Main, Germany, <sup>4</sup>Praxis Bohlken, Berlin, Germany, <sup>5</sup>University of Potsdam, Potsdam, Germany

**OBJECTIVES:** There are several factors that affect the risk of developing dementia. Various studies have shown that defined diagnoses and medications increase or decrease dementia risk. But the relatively small numbers of dementia patients in some of these studies make the interpretation of their results difficult. The aim of this work was to estimate risk factors for dementia in German primary care patients. **METHODS:** The case-control study included 11,956 primary care patients in the age group 70-90 years with first dementia diagnosis during the index period (01/2010-12/2014) (Disease Analyser, Germany). Furthermore, 11,956 controls without any dementia diagnosis were included after individual matching (1:1) to dementia cases on age, sex, type of health insurance and physician. The practice visit records were used to determine 10-year prior index continuous follow-up. Multivariate logistic regression models were fitted with dementia as dependent variable and the potential predictors. **RESULTS:** Mean age of patients and controls was 80.4 (SD: 5.3) years. 39.0% of them were male and 1.9% had a private health insurance. In multivariate regression model, the following variables were significantly related to an increased risk for dementia: diabetes (OR: 1.17; 95% CI: 1.10-1.24), lipid metabolism (OR: 1.07; 1.00-1.14), stroke incl. TIA (OR: 1.68; 1.57-1.80), Parkinson disease (OR: 1.89; 1.64-2.19), intracranial injury (OR: 1.30; 1.00-1.70), coronary heart disease (OR: 1.06; 1.00-1.13), mild cognitive impairment (OR: 2.12; 1.82-2.48), mental and behavioural disorders due to use of alcohol (OR: 1.96; 1.50-2.57). Use of statin (OR: 0.94; 0.90-0.99) and proton-pump inhibitors (PPI) (OR: 0.93; 0.90-0.97) were protective for the incidence of dementia. **CONCLUSIONS:** Risk factors for dementia found in this study were in line with the literature. There is also evidence for a protective effect of statin use with respect to the incidence dementia. Further studies are required to investigate the association between PPIs and a decreased risk of dementia.

## PMH3

## COGNITIVE SYMPTOMS IN MAJOR DEPRESSIVE DISORDER AND THEIR ITALIAN PSYCHIATRISTS' PERCEPTION

Pegoraro V<sup>1</sup>, Cataldo N<sup>1</sup>, Albert U<sup>2</sup>, Brugnoli R<sup>3</sup>, Caraci F<sup>4</sup>, Dell'Osso BM<sup>5</sup>, Di Sciacio C<sup>6</sup>, Tortorella A<sup>7</sup>, Vampini C<sup>8</sup><sup>1</sup>IMS Health Information Solutions Medical Research srl, Milan, Italy, <sup>2</sup>University of Turin, Turin, Italy, <sup>3</sup>Azienda Ospedaliera Sant'Andrea, Rome, Italy, <sup>4</sup>University of Catania, Catania, Italy, <sup>5</sup>University of Milan - Ospedale Policlinico, Milan, Italy, <sup>6</sup>Policlinico Hospital, Bari, Italy, <sup>7</sup>University of Naples SUN, Naples, Italy, <sup>8</sup>Ospedale Civile Maggiore, Verona, Italy