RE-HOSPITALIZATION RATES OF ACUTE CORONARY SYMORDOM PATIENTS IN REAL WORLD CLINICAL PRACTICE: OBSERVATIONS FROM A NATIONAL ADMINISTRATIVE CLAIMS DATA
Tuncali O1, Gandhi RK2, Bhanydy J3, Stephenson J1, Gold A4, Fu AC5, Kern D6, Singer J7
1HealthCare, Inc., Wilmington, DE, USA, 2AstraZeneca Pharmaceuticals LP, Wilmington, DE, USA
OBJECTIVES: The examination of hospitalization rates are increasingly being used as quality of care measures that have significant reimbursement implications. We examine the rates of re-hospitalization and mortality of acute coronary syndrome (ACS) patients in real-world clinical practice. METHODS: Commercially-insured patients (age <18 years) with an index hospitalization for ACS (ICD-9-CM codes for acute myocardial infarction or unstable angina (UAI) between 1/1/2007-7/31/2010 were identified from medical claims in the HealthCore Integrated Research Database (HIRD). Patients with ACS events within one year prior to index hospitalization were excluded. Relevant intermediate endpoints to conversion rates within 30 days and 12 months after index event were evaluated. RESULTS: Of 66,772 ACS patients (60% male; mean age 66.6 years), 21% had diagnostic coding for ST elevation myocardial infarction (STEMI), 31% had coding for non-ST elevation myocardial infarction (NSTEMI), 37% had UA, and 11% had not otherwise specified (NOS). Approximately, 90% and 52% of patients had 30-day and 12-month rates within 30 days and 12 months after index event were evaluated. RESULTS: Of 66,772 ACS patients (60% male; mean age 66.6 years), 21% had diagnostic coding for STEMI. The 30-day all-cause re-hospitalization rate was 16.3% (STEMI: 16.4%, NSTEMI: 19.0%, UA: 13.3%, NOS: 20.6%) and 6.3% (STEMI: 8.8%, NSTEMI: 6.6%, UA: 5.2%, NOS: 4.5%) for an ACS-related re-hospitalization. The 12-month all-cause re-hospitalization rate was 41.3% (STEMI: 39.0%, NSTEMI: 46.4%, UA: 38.2% NOS: 46.6%), and 16.6% for an ACS-related re-hospitalization. The 30-day post-index mortality rate was 2.4% (STEMI:1.8%, NSTEMI:4.3%, UA:0.5%, NOS:5.2%) and the 12-month rate was 7.0%. For patients with ages > 65 years, the observed mortality rates were 4.0% and 16.3%, respectively. CONCLUSIONS: The re-hospitalization and mortality rate for ACS patients within 30 days and 12 months post-index hospitalization discharge as observed in real-world clinical practice remain high. Use of more effective therapies may provide an opportunity to improve important clinical and economic outcomes in ACS patients.

IDENTIFYING EFFICIENT ACUTE CLINICAL PATHWAYS FOR CHEST PAIN: USING LINKED, ROUTINELY COLLECTED DATA
OBJECTIVES: We examine current treatment patterns associated with the use of antiarrhythmics for pharmacologic cardioversion and evaluate time to cardioversion. METHODS: Patients may provide an opportunity to improve important clinical and economic outcomes in patients with ACS. Approximately, 90% and 52% of patients had 30-day and 12-month rates within 30 days and 12 months after index event were evaluated.

DEVELOPMENT AND VALIDATION OF A SHORT PRO MEASURE OF HEALTH STATUS FOR INDIVIDUALS WITH ACUTE MYOCARDIAL INFARCTION: THE MYOCARDIAL INFARCTION DIMENSIONAL ASSESSMENT SCALE (MIDAS)
Jenkinson C1, Thompson D2, Roebuck A2, Churchman D1
1University of Oxford, Health Services Research Unit, Oxford, Oxfordshire, UK, 2Australian Catholic University, Melbourne, Victoria, Australia, 3United Lincolnshire NHS Trust, Lincoln, Lincolnshire, UK, 4Tiss Innovation Ltd., Oxford, Oxfordshire, UK
OBJECTIVES: To develop and validate a disease-specific health status measure for individuals with myocardial infarction (MI). METHODS: The development of the Myocardial Infarction Dimensional Assessment Scale (MIDAS) followed three main stages: Stage 1 consisted of in-depth, semi-structured, exploratory interviews conducted on a sample of 31 patients to identify salience and concern to patients with MI. These interviews generated 48 candidate questions. In stage 2 the 48-item questionnaire was used in a postal survey to identify appropriate rephrasing/shortening, to determine acceptability and to help identify sub-scales of the instrument. In stage 3 the construct validity of MIDAS subscales was examined in relation to clinical and other health outcomes. RESULTS: The MIDAS contains 35 questions measuring seven areas of health status: physical activity, insecurity, emotional reaction, dependency, diet, concerns over medication and side effects. The measure has high face, internal and construct validity and is likely to prove useful in informing treatment regimes for MI. CONCLUSIONS: The MIDAS has acceptable validity and reliability. It is suitable for use in a variety of settings for patients with myocardial infarction.

IDENTIFICATION OF RESPONSE SHIFT AMONG HYPERTENSIVE PATIENTS WITH CORONARY ARTERY DISEASE USING TWO STRUCTURAL EQUATION MODELING TECHNIQUES
Gandhi PK1, Reed LDP, Huang IC2, Kimberlin C3, Kaut T4, Sub DC5
1University of Florida, Gainesville, FL, USA, 2Southeastern Oklahoma State University, Weatherford, OK, USA, 3School of Pharmacy, Rutgers University, Piscataway, NJ, USA
OBJECTIVES: We examine current treatment patterns associated with the use of antiarrhythmics for pharmacologic cardioversion and evaluate time to cardioversion.
OBJECTIVES: To identify response shift using two structural equation modeling (SEM) techniques with the SF-36 Health Survey. METHODS: Hypertensive patients with coronary artery disease (CAD) who completed both baseline and one year follow-up of the SF-36 were included (n = 909). An occurrence of response shift using SEM techniques was performed for the study and the model was identified. SEM techniques were used to conduct SEM procedures. A variety of fit indices were used to determine model fit. For both SEM approaches, response shift is defined based on changes in various parameters in the measurement model. Effect sizes were calculated for the contribution of response shift on the change of SF-36 domain scores. We hypothesized the divergence in defining type of response shift linked to changes in various parameters will lead to different findings. RESULTS: Only the SF-36 physical functioning (PF) scale was identified with recalibration response shift in both Oort and Schmitt SEM approaches. With Oort approach, recalibration was identified by the change in intercepts, whereas Schmitt approach defines recalibration as the change in factor variances or factor loadings over time. Effect size of the recalibration response shift on the change of PF domain scores was marginal: 0.11. CONCLUSIONS: This is the first study to identify response shift in hypertensive CAD patients using SEM approach. Recalibration response shift was identified using both Oort and Schmitt SEM approaches. Different interpretation of specific PF items by hypertensive CAD patients before and after treatment may contribute to the recalibration response shift. By looking more closely at the SF-36 PF domain scores among hypertensive CAD patients will enable us to provide nuanced attention and direct treatment for the most impaired aspects of quality of life.

PCV112 EXTENSION OF META-ANALYSIS IN COMPARING OF FimasARTAN WITH LOSARTAN IN BLOOD PRESSURE LOWERING EFFECT Na Y, Lee EK SooMyung Women's University, Seoul, South Korea OBJECTIVES: A new drug fimasartan was developed and had currently been approved in Korea for the treatment of hypertension. The study aimed to identify whether the main results of direct comparative study maintains consistency with those of extension of meta-analysis in the blood pressure lowering effect of fimasartan with losartan. METHODS: Systematic reviews of literatures of clinical trials including fimasartan or losartan were conducted. The blood pressure change from baseline were used as an effectiveness measure and was pooled in RevMan 4.0. For direct comparison, the head-to-head randomized controlled trial (RCT) of fimasartan and losartan was used. For indirect comparison, it followed to method of adjusted indirect comparison (Bucher 1997) using common comparator and used ITC (Indirect- Treatment Comparison) program (CADTH). In addition, Bayesian mixed treatment comparison (MTC) was performed on which combines whole pairwise comparison studies together by WinBugs program. After that, the results were compared with that of a direct comparison. RESULTS: In regard to direct comparison, there is the only head-to-head trial (Phase III) report of comparing fimasartan with placebo (Phase IIb), there are no reports on the development of Stevens-Johnson syndrome when phenytoin and vancomycin or in involvement with other drug treatment. It also confirms the possible increased risk of developing Stevens-Johnson syndrome when phenytoin is associated to corticosteroids.

PSS2 DIAGNOSED AND UNDIAGNOSED DRY EYE, SYMPTOM SEVERITY, AND ASSOCIATED FACTORS AMONG MEN AND WOMEN IN THE UNITED STATES Schaumburg DA, Lütz2 2Brigham and Women's Hospital, Boston, MA, USA, 2Fayer, Inc., San Diego, CA, USA OBJECTIVES: To examine factors associated with dry eye disease (DED) in the US. METHODS: We conducted a cross-sectional survey of 4000 participants in the Women’s Health Study and Physicians’ Health Studies with diagnosed DED or severe symptoms. We assessed the current level of symptoms by the Ocular Surface Disease Index (OSDI) and the Symptom Assessment Questionnaire. RESULTS: Diagnosis, co-morbidities, treatments, and patient satisfaction. RESULTS: 3390 (84.8%) subjects returned questionnaires. 2099 participants reported a diagnosis of DED, and 1291 denied DED diagnosis (73.9% of these had reported DED diagnosis previously). Among 451 subjects selected based on severe symptoms alone, 114 (25.3%) reported a new diagnosis of DED, which was more strongly associated with severe symptoms by SANDE (OR = 2.24, p = 0.001), than by OSDI 33-100 (OR = 1.38, p = 0.25). Blepharitis (OR = 2.03, p = 0.05) was also associated with new DED diagnoses. Among those who currently denied DED diagnosis, 15.9% had severe (SANDE) and 40.4% had mild-moderate symptoms (SANDE 15-40). Adjusting for age and sex, participants with symptoms only were less likely than diagnosed patients to have an eye exam ≥1/year (OR = 0.71, p = 0.02), use antidesipressants (OR = 0.76, p = 0.04), use antihistamines (OR = 0.67, p = 0.00) and use bronchodilators (OR = 0.65, p = 0.001), and more likely to report refractive surgery (OR = 1.67, p = 0.02), and contact lens wear (OR = 2.51, p = 0.0001). In age- and sex-adjusted models including all respondents, those who currently reported DED diagnosis at ≥1/year exam (OR = 1.32, p = 0.0001), severe symptoms (SANDE ≥40, OR = 2.00, p = 0.001), blepharitis (OR = 1.41, p = 0.007), use antidesipressants (OR = 1.43, p = 0.003), artificial tears (OR = 2.01, p = 0.001), or other DED treatments (OR = 1.70, p = 0.0001) were more likely to report diagnoses. CONCLUSIONS: These observations suggest the possibility of under-diagnosis of DED, and are also consistent with a milder and/or more intermittent type of DED. Individuals with diagnosed DED are more likely to have severe symptoms, despite therapy.

PSS3 PERSISTENCE WITH STATINS AND THE RISK OF AGE RELATED MACULAR DEGENERATION IN A LARGE HEALTH ORGANIZATION IN ISRAEL Chodick G, Shalev Y, Goldstein L, Sror M Maccabi Healthcare Services, Tel Aviv, Israel OBJECTIVES: To investigate the association between persistent use of statins and the risk of age-related macular degeneration (AMD). METHODS: A population-based retrospective cohort among adults who began statin therapy between 1995 and 2006 in a large health organization in Israel. The organization’s central computerized databases were used to collect data on incident AMD cases diagnosed by ophthalmologists. RESULTS: A total of 96,991 individuals aged 55 or older were identified. During the study follow-up period 409,113 person-years, there were 2,732 incident AMD cases (6.68 per 1,000 person-years). The crude incidence density rate of AMD among patients at the lowest quintile of persistence with statins (1.74/1000) was 5.7 times that of highest persistence quintile (7.13 per 1000). After adjustment for potential confounders, patients in the highest quintile of persistence with statins had a hazard ratio of 0.99 (95% CI: 0.78-1.26) for AMD compared with patients in the lowest FDC quintile. In addition to age, AMD was found to associate with part smoking, asthma, diabetes and frequent visits to ophthalmologists or primary physicians prior to index date. CONCLUSIONS: Our study agrees with previous studies that showed no association between persistent use of statins and reduced risk of AMD. These results suggest that the early reports on a strong protective effect of statins against AMD development, were probably a result of a small study effect.

PSS4 SYSTEMATIC REVIEW OF THE EPIDEMIOLOGIC LITERATURE ON ATOPIC DERMATITIS IN CHILDREN Barbar J1, Reynolds S1, Heil-Ruess M2, Iskedjian M3 1Pharmaceutical Research and Development, Abbott Laboratories, GN, ON, Canada, 2Nutrition Marketing Services, Lausanne, Switzerland, 3Pharmaceutical Research and Consulting, Oakland, ON, Canada OBJECTIVES: A systematic review of the literature was performed to gather the epidemiological evidence related to atopic dermatitis (AD) in a pediatric population. METHODS: OVID MEDLINE® was searched using terms related to AD, epidemiology, incidence/prevalence in a population ≤18 years old. Two researchers undertook the inclusion/exclusion process on the 466 citations that had been identified. A third person acted as an overall reviewer and adjudicator. RESULTS: The systematic review of the Study of Asthma and Allergy in Children in Childhood (ISAAC) which reported the prevalence of AD in children 6-7 years old from 35 countries at two distinct time periods (around 1995 and 2002). A further 32 independent studies were identified for inclusion in this review. These studies reported an incidence (n = 2), prevalence (n = 25) or both (n = 5) in Europe (n = 23), Southeast Asia (n = 8) and Africa (n = 1). The number of study participants differed greatly (n = 137 to n = 317,926). According to ISAAC, the worldwide prevalence rate of AD increased by a rate of 36% from 12.9% in 1995 to 17.5% in 2002. Over that same time period, a 46% increase was reported for North America and Western Europe with phenytoin and vancomycin or in involvement with other medications. However, there are no reports on the development of Stevens-Johnson and Red man syndrome when phenytoin and vancomycin were used simultaneously with other drug treatment. It also confirms the possible increased risk of developing Stevens-Johnson syndrome when phenytoin is associated to corticosteroids.