

1.71) or re-admission (HR: 0.89, 95% CI: 0.78-1.02). **CONCLUSIONS:** The higher risk of severe hypoglycemic events and re-admission associated with non-PI-concordant OAD treatment after being discharged among hospitalized T2DM patients with moderate to severe CKD suggests prescribing patterns that consider renal impairment may be important from both clinical and economic perspectives.

PDB103

ORAL ANTI-DIABETIC USE AMONG NURSING HOME RESIDENTS WITH DIABETES AND MODERATE TO SEVERE CHRONIC KIDNEY DISEASE

Wu N¹, Yu X², Greene M³, Oderda G⁴

¹United BioSource Corporation, Lexington, MA, USA, ²United Biosource Corporation, Lexington, MA, USA, ³Georgia State University, Atlanta, GA, USA, ⁴University of Utah, College of Pharmacy, Salt Lake City, UT, USA

OBJECTIVES: To assess the rate of non-concordant use of oral anti-diabetic drugs (OAD) according to National Kidney Foundation (NKF) guidelines and drug package inserts (PI) among nursing home (NH) residents with diabetes and moderate to severe chronic kidney disease (CKD). **METHODS:** Long-term care administrative database with medical and pharmacy claims information was analyzed. Residents with diabetes and moderate to severe CKD who remained in NHs for at least 90 consecutive days between 2008 and 2011 were selected. Residents with moderate to severe CKD was identified if they had at least one glomerular filtration rate <60 ml/min/1.73m² in the 1 year prior to or during the 90-day period. Concordance was analyzed among residents that filled at least 1 prescription for OAD during the first 90-day continuous stay. If at least 1 of the OADs prescribed was not concordant to NKF or PIs, then that resident was classified as non-concordant. **RESULTS:** Of the 730 diabetic residents with diabetes and stage 3-5 CKD, 186 residents used the OADs included in the NKF guidelines during their 90-day stay in a NH. Of the 186 residents, 135 (72.6%) received the OADs in accordance with NKF guidelines, and 77 (41.4%) received the medications in accordance with their respective PIs. There was no significant difference in the age, gender, and educational status and NH facility location distribution among NKF and PIs concordant and non-concordant groups. However, residents in NKF concordant group were more likely to be Hispanic (32.6 vs. 13.7%, p<0.05) compared to NKF non-concordant group. **CONCLUSIONS:** The findings suggest that significant proportion of the OAD-treated residents with moderate to severe CKD, received at least one OAD prescription that was not concordant to NKF guidelines or PIs. Efforts should be made to more closely monitor OAD treatments of NH residents

PDB104

ADHERENCE TO ADA HBA1C TESTING FREQUENCY AND ANTI-DIABETIC THERAPY GUIDELINES IMPROVES PATIENT OUTCOMES

Lian J, Liang Y

Novo Nordisk Inc., Princeton, NJ, USA

OBJECTIVES: The aim of this retrospective study is to evaluate the adherence of type 2 diabetes (T2DM) patients starting drug treatment to the ADA guidelines on HbA_{1c} testing and treatment modification and determine its impact on treatment outcomes. **METHODS:** Data was obtained from a large health care plan claims database between July-2008 to December-2011. Eligible patients were aged ≥18 years with ≥2 T2DM diagnoses (ICD-9CM codes 250.x0, 250.x2), and were drug-naïve for ≥6 months before the first anti-diabetic drug (termed "index treatment") was required. Patient adherence to the HbA_{1c} testing guideline was defined as an initial HbA_{1c} test within 105 days of the index treatment and subsequent tests within 105 or 195 days of the previous test depending on the result (≥7 or <7%, respectively). Adherence to the drug modification guideline was defined as a change in treatment within 45 days of HbA_{1c} ≥7%. Patient outcome after one year was evaluated using the HbA_{1c} values closest to 365 days after index treatment. **RESULTS:** Of the 14,164 patients who met the study criteria, 4,419 (31.20%) met the testing criteria for drug modification (HbA_{1c} ≥7%). Of these patients, 546 (12.36%) met the recommended testing frequency, 934 (21.14%) adhered to the drug modification guidelines, and 117 (2.65%) met both guidelines. The odds ratio of a patient achieving the HbA_{1c} target (<7%) who adhered to the testing guideline was 4.66 compared with a patient who did not meet the testing guideline. Furthermore, the odds ratio of a patient in this population achieving the HbA_{1c} target was 4.95 when both guidelines were met, as compared with a patient who met neither guideline. **CONCLUSIONS:** Adherence to ADA guidelines on HbA_{1c} testing frequency and therapy modification correlated with improved outcomes one year after initial drug treatment.

PDB105

RELATIONSHIP BETWEEN SELF-MONITORING OF BLOOD GLUCOSE AND TREATMENT PROGRESSION IN PATIENTS WITH TYPE 2 DIABETES MELLITUS

Wade RL¹, Kindermann SL¹, Hou Q², Dirani R³

¹Cerner Research, Culver City, CA, USA, ²Cerner Research, North Kansas City, MO, USA,

³LifeScan, Inc., West Chester, PA, USA

OBJECTIVES: To evaluate the relationship between self-monitoring of blood glucose (SMBG) test strip utilization and medication intensification in Type 2 diabetes mellitus (T2DM). **METHODS:** A retrospective study of MarketScan data examined patients with T2DM with ≥2 prescription claims or a 90-day supply of at least one non-insulin antihyperglycemic (AH) agent during a 4-month baseline period between July 1, 2006 to December, 31, 2009. The first claim for an AH was the index date. Patients were classified by number and dosage of AH agents, and by their utilization of SMBG test strips during the baseline period. Utilization of AH agents and insulin was assessed during follow-up between months 6-12 post-index. Medication intensification included an increase between baseline and follow-up in the number of AH classes used, an increase in dose, or the addition

of insulin. An analysis of medication intensification from baseline to follow-up between users and non-users of SMBG test strips at baseline was conducted using chi-square analysis. **RESULTS:** Among 824,461 patients selected, 482,854 used one, 258,477 used two, and 83,130 used three AH agents at baseline. SMBG test strip use was observed in 28.3% of the entire population, with 17.0% using >4 test strips weekly. The following treatment changes occurred from baseline to follow-up: no change 67.9%, a decrease in AH classes 13.0%, an increase in AH classes 15.4%, initiating insulin 2.5%, and increasing dose 6.8%. The utilization of SMBG test strips at baseline in patients with no change or a decrease in medication intensification during follow-up was 28.0%, which was significantly different compared to SMBG use in patients with an increase in AH classes (29.1%), patients initiating insulin (32.8%), and in patients increasing dose (30.6%) (all P<0.001). **CONCLUSIONS:** The use of SMBG test strips is associated with medication intensification among users of AH therapy in T2DM.

PDB106

UTILIZATION TRENDS OF VARIOUS FORMULATIONS OF TESTOSTERONE: AN ANALYSIS OF THE RAMQ DATABASE

Lachaine J¹, Beauchemin C¹, Lapierre ME¹, Snow LA²

¹University of Montreal, Montreal, QC, Canada, ²Abbott, St-Laurent, QC, Canada

OBJECTIVES: Testosterone is mainly used as androgen replacement therapy. The purpose of this study was to describe utilization trends of various testosterone formulations in a real life setting, using the RAMQ database. **METHODS:** Male patients covered by the Quebec provincial drug reimbursement program (RAMQ) who had used at least one formulation of testosterone in the period from June 1, 2003 to March 31, 2011 were selected. Characteristics of the treatments were analyzed, including switches from one formulation to another. A 1:1 control group matched for age of patients not using any formulation of testosterone was created and incidence of co-morbidities in patients in the study group was compared to the control group. **RESULTS:** Among a random sample of 125,000 patients covered by the drug plan, 723 males used at least one formulation of testosterone (0.57%). The average age was 57.2 years (SD=14.4). A total of 7 different formulations of testosterone were used by these patients. The most frequent formulations used during the study period were Andriol® (48.4%) and AndroGel® (41.4%). Testosterone formulations were mainly prescribed by GPs (73%), endocrinologists (11.9%) and urologists (7.5%). About 32% of patients used more than one formulation during the study period. Among patients who switched from one formulation to another, switching to AndroGel was the most frequent trend. Average treatment persistence varied from 147 days with Testim® to 674 days with AndroGel. Prevalence of many co-morbidities was significantly higher amongst these patients compared to the control group. Co-morbidities included mental disorders (63.2%), hyperlipidemia (63.8%), hypertension (51.2%), articulation pain (32.1%) back pain (31.4%), HIV (6.2%) and migraine (6.6%). **CONCLUSIONS:** Patients on androgen replacement therapy have significantly more co-morbidities than controls. A significant proportion of patients will switch to a different formulation of testosterone over time, AndroGel being the most frequent choice.

SENSORY SYSTEMS DISORDERS – Clinical Outcomes Studies

PSS1

THERAPEUTIC TRIAL OF INTRALESIONAL INJECTION OF MYCOPHENOLATE MOFETIL IN PSORIASIS VULGARIS: CLINICAL, HISTOPATHOLOGICAL AND IMMUNOHISTOCHEMICAL EVALUATION

Ashoush NN

British University in Egypt, Cairo, Egypt

OBJECTIVES: Systemically administered mycophenolate mofetil (MMF) has a beneficial effect in psoriasis patients. The purpose of the current study was to investigate the efficacy and safety of intralesional MMF in ordinary psoriasis vulgaris and to find out the best regimen of treatment. **METHODS:** In hundred plaque psoriasis patients, response to different concentrations (3.125, 6.25, 12.5 and 25 mg/ml) of MMF have been objectively evaluated and compared to control (5% dextrose). Patients were divided into two groups, group (A): patients who were injected once every two weeks for six weeks and group (B): patients who were injected once every week for six weeks. Patients were followed up clinically, histopathologically, and immunohisto-chemically for CD3. **RESULTS:** Maximum response to MMF was achieved 8 weeks after initiation of therapy. There was significant reduction of erythema, thickness, scaliness (P≤0.01) but not surface area (P=0.152) compared to control. Histopathologically, there was significant reduction in scores of parakeratosis, acanthosis, dilatation of papillary vessels and density of dermal mononuclear infiltrate. Immunohistochemical semi-quantitative analysis revealed variable, but in general, obvious degree of reduction in the density of CD3+ cellular infiltrate (i.e. T-cells) at the eighth visit compared to the first visit in all specimens examined. No significant difference could be seen in the efficacy of different concentrations with different regimens. No systemic or local adverse effects were noted apart from mild and transient burning sensation especially with higher concentrations. **CONCLUSIONS:** Intralesional MMF could be adopted as a safe and effective adjunctive line of treatment especially in localized plaque psoriasis.

PSS2

COMPARING TREATMENT PATTERNS AND EFFICACY OF RANIBIZUMAB FOR PATIENTS WITH AGE-RELATED MACULAR DEGENERATION (AMD): A META-ANALYSIS

Jiang S, Park C, Barner JC

The University of Texas at Austin, Austin, TX, USA