are complementary technologies. METHODS: We extracted data for 5016 PCI patients with DES or non-DES, admitted between April 24 and June 30, 2003 from the Solucient, LLC ACTracker database—a proprietary database with detailed drug information. Patients were identified as having received a GPIIb/IIIa inhibitor if they received any of the following drugs: abciximab, tirofiban, or eptifibatide. The likelihood of a patient with a DES receiving a GPIIb/IIIa inhibitor was modeled using a logistic regression equation, adjusting for hospital and demographic characteristics, as well as whether the patient had an acute myocardial infarction (AMI). RESULTS: Patients undergoing PCI with a DES were less likely than those undergoing PCI with a non-DES to receive a GPIIb/IIIa inhibitor. However, the results were not statistically significant, (OR = 0.917, 95% CI 0.793, 1.061). CONCLUSIONS: Data from the time period just after approval of drug-eluting stents does not show any statistically significant difference between use of GPIIb/IIIa inhibitors among PCI patients receiving DES and non-DES. However, the lower use of GPIIb/IIIa inhibitors among DES patients in our study may prove to be significant once data from additional PCI patients becomes available.

PCV59

CLINICAL PHARMACIST INVOLVEMENT IN COMMUNITY ANTICOAGULATION CONTROL

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Many patients are chronically treated with oral anticoagulants to prevent thromboembolic events. These medications are life saving but have a narrow therapeutic window, which can expose these patients to life threatening events if the International Normalized Ratio (INR) is not kept within the therapeutic window. High potential of drug-drug and drug-food interactions adds to the complexity of achieving good anticoagulation control, and knowledge of these interactions can assist in making better therapeutic decisions. OBJECTIVE: To evaluate the impact of clinical pharmacist intervention on anticoagulation control in chronic patients. METHODS: Thirty-seven chronic patients with uncontrolled anticoagulation were randomly identified from the data systems of Maccabi Health care Services. The clinical pharmacist intervention consisted of meeting the family practitioners in order to go over patient clinical charts, and sending written recommendations regarding anticoagulation control. Some of the patients were also invited to a personal meeting with the clinical pharmacist for pharmaceutical guidance, and were closely followed throughout the process. Outcome analysis was based on comparison of the last two INR results before and after the clinical pharmacist intervention, according to target INRs, matching the specific indication for anticoagulant therapy. RESULTS: Following the clinical pharmacist intervention we observed a two-fold increase in the number of patients with anticoagulation control: a 2.5 fold increase in the number of patients with anticoagulation control in the optimal range (INR between 2–3 for most of the indications and 3–4 for mechanical valve replacement), and a 1.8 fold increase in the number of patients with anticoagulation control in the tolerable range (INR between 1.5–4 for most of the indications and 2–4.25 for mechanical valve replacement). These differences were statistically significant (p = 0.018). CONCLUSION: These findings indicate that chronic patient’s anticoagulation control strongly benefits from clinical pharmacist intervention. Further study is required to control for spontaneous patient improvement.

PCV60

DISORDERS OF LIPOID METABOLISM: LIKELIHOOD OF PRESCRIPTION THERAPY

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OBJECTIVES: Individuals with hyperlipidemia are at risk for CHD, hypertension and diabetes. This study examined the likelihood of receiving prescription therapy based on patient diagnoses, demographics and other factors. METHODS: The study design was retrospective covering January 2000–December 2002. It encompassed 15,000 electronic medical records from primary care practices in eight States. Patients with lipid disorders were identified by ICD-9 diagnoses. Treatment patterns and laboratory data were evaluated vs. NCEP ATP III Guidelines. RESULTS: On average, 23.4% of patients eligible for treatment according to the Guidelines were prescribed cholesterol lowering drugs. Of those, 40.5% of patients (95% CI 39.6%–41.3%) had prescription therapy without a hyperlipidemia diagnosis. In each of these cases, one or more co-morbid diagnoses for CHD risk were present. The likelihood of treatment for patients <45 years was 1.37 times lower (p < 0.001) than older patients in the “official” risk age for CHD (55–64 years). The probability of treatment for men was higher than for women (OR 1.11 p < 0.01). There was no significant difference in treatment frequency for Caucasians vs. blacks. The likelihood of treatment for patients with documented hyperlipidemia was 3.86 times higher than for those without a diagnosis (p < 0.0001). The likelihood of treatment for patients with CHD was 1.6 times higher (1.59–1.89) than for patients without. CONCLUSIONS: In patients diagnosed with lipid disorders and at risk for CHD, the use of cholesterol lowering medication appears to be relatively low compared to that recommended by the NCEP ATP III Guidelines. In those patients who are prescribed cholesterol lowering medication without documented hyperlipidemia, the presence of CHD risk factors appear to be a major consideration. Possible reasons for a relatively low level of prescribing include undocumented treatment by life style changes, lack of awareness of NCEP guidelines by physicians, economic constraints, and/or other factors.

DIABETES (including Parathyroid Disease)

DIABETES (including Parathyroid Disease)—Clinical Outcomes Studies

PDB1

LOWER INCIDENCE OF MICROVASCULAR EVENTS ASSOCIATED WITH PIOGLITAZONE MONOTHERAPY THAN INSULIN MONOTHERAPY IN PATIENTS WITH TYPE 2 DIABETES: A RETROSPECTIVE PROPENSITY SCORE MATCHED COHORT ANALYSIS

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OBJECTIVE: To examine the microvascular risk associated with use of pioglitazone monotherapy versus insulin monotherapy in type 2 diabetes patients by retrospective analysis of the GE Medical Systems (GEMS) clinical database. METHODS: Patients ≥18 years of age with a diagnosis of type 2 diabetes mellitus were included if on active treatment after 1999, and if no microvascular events (one or more of neuropathy, nephropathy, or retinopathy) were present at baseline. Only patients who were initiated with pioglitazone or insulin as monotherapy were
evaluated. The index date was chosen such that each patient had at least 6 month’s treatment with either of the products—before and at least 6 months after that date. Patients receiving other oral anti-diabetic drugs were excluded. To compensate for lack of double-blind randomization and to reduce selection bias, patients in the pioglitazone group were matched 1:1 with the insulin group based on propensity score calculated using demographic characteristics, co-morbidities, medical therapies, duration of diabetes, and duration of treatment. The odds ratio for the microvascular event in the follow-up period was determined using logistic regression with treatment as a factor and significant (p < 0.1) baseline characteristics as covariates in the model.

RESULTS: A total of 453 patients in the pioglitazone group were matched to 453 patients in the insulin group. The crude event rate in the pioglitazone group was 3.09% compared with 9.49% in the insulin group (p < 0.001) and the odds ratio was 0.304 for pioglitazone (95% CI = 0.164, 0.564; p < 0.001). The significant risk reduction projected for the pioglitazone group could not be completely explained by baseline laboratory measurements of lipids, serum creatinine, blood pressures, or duration of diabetes. CONCLUSION: In this retrospective, propensity-matched analysis in patients with type-2 diabetes, the pioglitazone-treated group was associated with a significantly lower incidence of microvascular events than the insulin-treated group.

COMPARISON OF PIOGLITAZONE WITH OTHER ANTIDIABETIC DRUGS FOR ASSOCIATED INCIDENCE OF LIVER FAILURE: NO EVIDENCE OF INCREASED LIVER FAILURE WITH PIOGLITAZONE

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OBJECTIVE: To assess the incidence of liver failure in association with anti-diabetic treatment using pioglitazone versus other oral anti-diabetic medications. METHODS: The study was a retrospective analysis of claims data from the PharMetrics Patient-Centric Database that had over 1.12 million enrollees with type 2 diabetes. All patients ≥18 years of age with type 2 diabetes who had initiated treatment with either a thiazolidinedione (pioglitazone and rosiglitazone), sulfonlurea, or metformin were identified and matched on the basis of propensity scores, which served as a proxy for severity of disease. The primary measure of interest was the incidence of liver failure or hepatitis post-index date. In addition to unadjusted comparisons, Cox proportional hazards models were employed to estimate the risk of developing liver failure or hepatitis. RESULTS: There was no significant difference in the 1-year and 2-year incidence rates of liver failure or hepatitis (primary and secondary diagnosis) between the pioglitazone monotherapy group and respective comparator groups (pairs matched with rosiglitazone, n = 1847 (p > 0.808); with sulfonylurea, n = 1474 (p > 0.219); and with metformin, n = 1137 (p > 0.284)). Cox proportional hazards models controlling for age, pre-index total health care costs, Charlson comorbidity index, procedures and a hospitalization or ER visit for pre-index hyperglycemia echoed these results. Further, no primary or secondary diagnosis of liver failure was reported in the pioglitazone group during the follow-up period. CONCLUSION: Results of retrospective data analysis using the PharMetrics cohort of patients with type 2 diabetes demonstrate that there is no evidence of increased risk of liver failure or hepatits for patients initiating therapy on pioglitazone compared to other oral anti-diabetic agents. Pioglitazone therapy was not associated with an increased risk of liver failure at 2 years relative to other oral anti-diabetic therapies.