of the relationship between G-CSF use and FN in Non-Hodgkin's Lymphoma (NHL) patients.

Methods: This is a post-hoc analysis of data from IMPACT NHL, an observational cohort study. The analysis was performed on the subset of prospectively enrolled adults with any histological type of NHL treated with (R)-CHOP. The relationship between baseline patient characteristics and G-CSF prophylaxis in the first cycle of chemotherapy was examined using logistic regression. Multivariable models were adjusted for age, gender, country, performance status, histology and regimen type.

Results: A total of 1187 patients were included in the analysis, of whom 49% received G-CSF prophylaxis in the first cycle. In bivariable analyses, factors significantly associated with G-CSF prophylaxis included older age, country, no bone marrow involvement, dose-dense regimen, investigator assessed high FN risk, DLBCL histology, poor ECOG performance status, higher planned cycles, chemotherapy dose, AST, CRP, LDH, and lower serum albumin, haemoglobin and glucose. In multivariable analyses, investigator-assessed high FN risk (OR 2.9, 95% CI 2.1-4.0), <8.8 mmol/L glucose (OR 1.7, 95%CI 1.0-2.8), $<3x10^9$/L ANC (OR 1.3, 95%CI 1.1-2.0), and >400 U/L LDH (OR 1.4, 95% CI 1.0-1.9) were associated with use of G-CSF prophylaxis.

Conclusions: In addition to well known risk factors for FN, country, glucose and LDH appear to be predictors of G-CSF prophylaxis in the first cycle of NHL patients receiving (R)-CHOP. These factors should be considered when interpreting G-CSF use in clinical practice.

112. Do Case-Only Designs Yield Consistent Results Between Them and Across Different Databases (DB)? Hip Fractures Associated with Benzodiazepines (BZD) as a Case Study

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Background: The case crossover (CXO) and self-controlled case series designs (SCCS) are increasingly used in pharmacoepidemiology. In both designs relative risk estimates are obtained within persons rather than between persons thus implicitly controlling for fixed confounding variables.

Objectives: To examine the consistency of relative risk estimates of hip/femur fractures (HF) associated with the use of BZD across case-only designs and across two different DB, when same protocol and analytical methods are applied.

Methods: CXO and SCCS studies were carried out in BIFAP (Spain) and CPRD (UK). For the CXO, exposure to BZD was divided into non-use, current (up to 30 days after the end of last supply), and recent (1-60 days after). A case moment with four control moments (each 90 days apart) were defined from index date (HF); odds ratios (OR; 95%CI) of current use vs. non-use were estimated using conditional logistic regression with adjustment for co-medications (AOR). For the SCCS, exposure to BZD was divided similarly, but current use was subdivided into:1-30; 31-60; 61-182; 183-365; and >365 days. A conditional Poisson regression was used to estimate incidence rate ratios (IRR; 95%CI) of current use as compared to non-use, adjusted for age. To investigate possible event-exposure dependence we also evaluated the relative risk excluding a pre-exposure time of 30 days.

Results: In the CXO current use of BZD was associated with an increased risk of HF in both DB, BIFAP [crude OR = 1.70 (1.50-1.92); AOR = 1.47 (1.29-1.67)] and CPRD [crude OR = 1.75 (1.60-1.92); AOR = 1.55 (1.41-1.67)]. In the SCCS IRRs for the first current period was 0.79 (0.68-0.92) in BIFAP and 1.42 (1.27-1.59) in CPRD. However, when we removed the 30 day pre-exposure period from non-use, the IRR for first current period was 1.40 (1.21-1.62) in BIFAP and 1.59 (1.42-1.78) in CPRD.

Conclusions: CXO designs yielded consistent results across DB, while SCCS did not. However, once we accounted for the event-exposure dependence, estimates derived from SCCS were more consistent across DBs and with CXO results.

113. Use of Antidepressant Medications in Depressed Older Adults and Predictors of Discontinuation of Antidepressant Use

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Background: Major depressive disorder is highly prevalent in the United States and increases morbidity and mortality particularly in older adults. National guidelines suggest 12-18 months of antidepressant treatment for depressed patients to maximize the benefits of treatment; however, patterns of medication use according to the guidelines are less well understood, especially in older adults who are at higher risk of adverse drug events.

Objectives: To describe the patterns of antidepressant medication use by community-dwelling older adults and examine the predictors of antidepressant medication treatment discontinuation in older adults covered by Medicare programs.

Methods: We performed a large nationally representative cross-sectional study using the Medicare Current Beneficiary Survey (MCBS) data from 2004 to 2008. We estimated a 6-month discontinuation rate of antidepressant medications in older adults who initiated antidepressant treatment following diagnosis with depression. We further developed a multivariable logistic regression model to identify predictors of discontinuation of antidepressant medication.

Results: We found that less than 5% of older adults in Medicare programs were diagnosed with major depression between 2006 and 2008. Nearly 1 in 2 depressed older adults were treated with antidepressant medications and 19.2% initiated medication after diagnosis. Of these new users of antidepressant medications, 30.3% discontinued medication therapy within 180 days of the treatment starting. The discontinuation rate at 6 month was higher in the SSRI/SNRI users (34.9%) compared to the TCA/other antidepressant users (21.2%). Living in a metropolitan area was a significant predictor of antidepressant discontinuation (adjusted odds ratio = 3.5; 95% confidence interval, 1.2-10.2).

Conclusions: Older adults tend to persist in antidepressant medication use. The descriptive information obtained in this study can provide points of discussion for physicians and other healthcare providers when they are working with older adults regarding barriers to persistence in antidepressant use.

114. Therapeutic Inertia and Intensified Treatment in Diabetes Prescription Patterns: A Nationwide Population-Based Study

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Background: Clinical guidelines based on empirical evidence emphasize the fact that aggressive drug therapy can mitigate or prevent the occurrence of diabetes-related complications; however, many physicians fail to prescribe appropriate drug therapy for the control of the disease.

Objectives: This study sought to measure therapeutic inertia by characterizing prescription patterns using secondary data obtained from the nationwide Diabetes Pay-for-Performance Project (DM-P4P) in Taiwan.

Methods: This retrospective cohort study employed data related to diabetes patients participating in the DM-P4P between 2006 and 2008. Hemoglobin A1c (A1c) results were used to evaluate therapy modifications adopted in response to poor control of diabetes (A1c values between 7% and 11%). We then examined the modification of therapy based on poor A1c control results to elucidate the issue of therapeutic inertia.

Results: A total of 168,876 diabetes patients (899,135 A1c results) presenting A1c values between 7% and 11% were adopted in this study. Prescription patterns were used to assign patients to a therapeutic inertia group or intensified treatment group. A total of 61.5% of the patients underwent modifications in therapy as a result of poorly controlled A1c levels, indicating the presence of therapeutic inertia in 38.5% of the cases. The most common treatment modification involved prescribing additional drugs from other therapeutic classes (68.3%), followed by increasing dosages of previously prescribed medications. Analysis of prescription patterns revealed that combination therapy was more