lymphoma, chronic lymphocytic leukemia/small lymphocytic lymphoma. Aspirin use was associated with reduced risk of chronic lymphocytic leukemia/small lymphocytic lymphoma (POR = 0.73 [0.56-0.96]) but not with the risk of all NHLs (POR = 1.01 [0.88-1.15]). Use of non-aspirin NSAIDs was associated with an increased risk of NHL (POR = 1.41 [1.01-1.97]) among females only.

Conclusions: The epidemiologic evidence remains inconclusive. Effects of NSAIDs may differ by drug type, NHL histological type, and sex. More studies taking in consideration these differences and employing sound epidemiologic designs are needed.

660. Calcium Channel Blockers and Cancer Risk Using the UK CPRD

Lamiae Grimaldi-Bensouda,[1,2] Mark de Groot,[3] Robert Reynolds,[4] Olaf Klungel,[3] Michel Rossignol.[1,5] [1]LA-SER, Paris, France; [2]Conservatoire National des Arts & Métiers, Paris, France; [3]Faculty of Science, Division of Pharmacoepidemiology & Clinical Pharmacology, Utrecht University, Utrecht, Netherlands; [4]National Institute for Health Data and Disease Control, Copenhagen, Denmark; [5]Department of Epidemiology, Biostatistics and Occupational Health, McGill University, Montreal, Canada.

Background: This study was part of the Pharmaco-epidemiological Research on Outcomes (PROTECT) project which aims at monitoring of the benefit-risk of medicines in Europe. Few epidemiological studies have investigated the association between calcium channel blockers (CCB) and cancer, and have provided contradictory evidence.

Objectives: To investigate whether CCB exposure is associated with cancer risk and whether the risk varies according to cancer subtype and duration of exposure.

Methods: A population-based matched-cohort study was conducted using data from the Clinical Practice Research Datalink and National Cancer Registration System. Eligible patients (18 to 79 years, over two years primary care and prescription history) with ≥1 CCB prescription between 1996 and 2009 (CCBC) were compared with two CCB unexposed cohorts: 1) patients without CCB exposure (NCCBC), and; 2) patients with no CCB and ≥1 other antihypertensive prescription (AHTC). CCBC was compared with NCCBC and AHTC according to cancer outcomes. Conditional logistic cox-regression models estimated multivariable hazard ratios (HR) and 95% confidence intervals (CI).

Results: There were 150,750 patients in the CCBC, 557,931 in the NCCBC, and 156,966 in the AHTC. Cancer rates (crude per 1000 person-years) were 16.51, 15.75 and 10.62 for the CCBC, NCCBC and AHTC respectively. Adjusted HRs (CI) of all cancer for the CCBC compared to the NCCBC and AHTC were 0.88 (0.86-0.89) and 1.01 (0.98-1.04) respectively. Adjusted HRs (CI) of breast, prostate, and colon cancer for the CCBC compared to the AHTC were 0.95 (0.87-1.04), 1.07 (0.98-1.16) and 0.89 (0.81-0.98) respectively. Adjusted HRs (CI) of all cancer for the CCBC compared to the NCCBC were 0.88 (0.85-0.91), 0.98 (0.93-1.04), and 1.11 (0.98-1.27) for 0 to 5 years, 5 to 10 years, and ≥10 years of cumulative drug exposure respectively.

Conclusions: This study showed strong evidence that CCB use is not associated with cancer. Shorter periods of CCB exposure showed a small protective effect for cancer, as did CCB exposure for colon cancer. Results will be discussed in relation to other findings from PROTECT work package two.

661. Spironolactone and Incidence of Cancers: A Propensity Score Matched Cohort Study in the Clinical Practice Research Datalink (CPRD)

Isla S Mackenzie, Alastair M Thompson, Li Wei, Steve Morant, Thomas M MacDonald. Medicines Monitoring Unit (MEMO), University of Dundee, Dundee, United Kingdom.

Background: Spironolactone is widely used to treat heart failure, high blood pressure and liver disease and its use has increased in recent years. Spironolactone has various hormonal effects and historical reports suggested possible links with increased risk of certain types of cancer.

Objectives: Our a priori hypothesis was that spironolactone use may change the risk of certain cancers. We investigated whether spironolactone use was associated with the following pre-specified primary outcomes: increased incidence of ovarian, endometrial, pancreatic and colorectal cancers and either increased or decreased incidence of prostate cancer (based on biological plausibility); increased incidence of renal cell, pharyngeal, thyroid and myelomonoblastic/cytic leukaemias (based on previous publications).