S082 Digital oral presentations

## **DOP43**

The risk of extra-intestinal cancer in inflammatory bowel disease (IBD): A systematic review and meta-analysis of population-based cohort studies

B.Z.S. Lo\*, M. Zhao, I. Vind, J. Burisch Copenhagen University Hospital Hvidovre, The Gastrounit, Hvidovre, Denmark

Background: Patients with Crohn's disease (CD) and ulcerative colitis (UC) are at increased risk of developing intestinal cancer compared with the background population. However, less is known about the risk of extra-intestinal cancers (EICs). A previous meta-analysis did not find an increased overall risk of EICs but was limited by the scarcity of available studies and the short length of follow-up in those cohorts. The aim of this study was to conduct a systematic review and meta-analysis of population-based cohorts assessing the risk of EICs in inflammatory bowel disease (IBD) patients.

Methods: A systematic literature search was carried out. Only population-based studies reporting on the prevalence or incidence of EICs were included. All studies were screened (603), and included studies were quality assessed by two investigators (BL, MZ). Studies eligible for meta-analysis were pooled for events, expected events or events in a control-population, and the length of follow-up in patient-years. A meta-analysis of the overall and site-specific risk of EICs and a stratified analysis of the cohorts (according to whether there were most patients followed before or after the year 2000) were conducted.

Results: In total, 36 studies were included in the systematic review and 14 studies were included in the meta-analysis. The majority of the studies reporting on the overall risk of EICs in their respective cohort were inconclusive due to lack of power. In the meta-analysis, the overall risk of EICs was found to be increased in both CD (IRR: 1.45 [1.26, 1.67]) and UC (IRR: 1.15 [1.02, 1.31]) patients (Figures 1 and 2). The stratified analysis showed a significant increased risk of EICs among CD patients both before (IRR: 1.58 [1.09, 2.28]) and after (IRR: 1.47 [1.28, 1.69]) the year 2000, while no increased risk was found among UC patients. Assessing site-specific EICs, both CD and UC patients demonstrated an increased risk of skin and hepatobiliary malignancies. Furthermore, CD demonstrated an increased risk of haematological and lung malignancies (Figures 3 and 4).

Conclusion: In conclusion, this systematic review and meta-analysis demonstrated that IBD patients, both CD and UC patients, are at an increased risk of developing EICs; both overall and at specific sites. The transition of the millennium did not increase the risk of EICs in CD or UC patients. However, more studies with longer follow-up are needed to assess the true risk of EICs posed by IBD.

## DOP44

Cancer risk in a high-incidence inflammatory bowel disease population: a Faroese IBD cohort study

J.M.M. Midjord\*<sup>1</sup>, A.G. Vang<sup>2</sup>, T. Hammer<sup>3</sup>, J. Burisch<sup>1</sup>, K.R. Nielsen<sup>1</sup>, The Faroese IBD Study Group <sup>1</sup>Medical Department, National Hospital of the Faroe Islands, Torshavn, Faroe Islands, <sup>2</sup>Department of Health and Nursing Sciences, University of the Faroe Islands, Torshavn, Faroe Islands, <sup>3</sup>Department of Occupational Medicine and Public Health, The Faroese Hospital System, Torshavn, Faroe Islands

Background: The association between inflammatory bowel disease and malignancy is still controversial despite many observational studies. The Faroese population exhibits the highest occurrence of inflammatory bowel disease (IBD) in the world. The aim of this study was to investigate the risk of cancer in Faroese IBD patients within the nationwide Faroese IBD cohort.

Methods: This was a nationwide cohort study of all IBD patients diagnosed in the Faroe Islands from 1960 to 2014. Clinical demographics and cancer diagnosis were retrieved from patient files and from the Faroese cancer registry. Patients were followed until the event of cancer, death or emigration. Patients diagnosed with cancer prior to the IBD diagnosis were excluded. Observed numbers of cancer were compared with expected numbers based on ASR(N) (Nordic age- and sex-specific incidence rates) from Nordcan, by multiplying ASR(N) with person-years and follow-up in the study cohort and presented as standardised incidence ratios (SIRs) with 95 % intervals (CIs).

Results: The cohort consisted of 664 incidence IBD patients. After excluding 12 patients with cancer prior to IBD diagnosis, 652 patients with a total follow-up length of 11 476 person-years were included (414 UC with 7.494 patient-years, 128 IBDU with 2.038 patient-years and 110 CD with 1.944 patient-years). A total of 56 patients developed cancer during the follow-up period compared with 39.2 expected cases in the background population. We observed no gender difference. In UC, 33 observed compared with 25.7 expected patients developed cancer (SIR 1.28; 95% CI, 0.88–1.80). In IBDU, 13 observed compared with 6.9 expected patients developed cancer (SIR 1.88; 95% CI 1.00–0.22). In CD, 10 cases were observed compared with 6.6 expected (SIR 1.51; 95% CI 0.73–2.79). The most common types of cancers observed are shown in Table 1.

Conclusion: In this nationwide cohort study, we found no overall risk of cancer in IBD patients in the geographic isolated Faroe Island. However, skin cancer occurred more than expected in IBDU patients. This finding needs to be investigated further including the influence of treatment on cancer risk.

## DOP45

Increased prevalence but not incidence of myocardial infarction and stroke in patients with inflammatory bowel diseases in Quebec in 1996–2015

C. Verdon¹, J. Reinglas¹, C. Filliter¹, J. Coulombe¹, L. Gonczi², W. Afif¹, G. Wild¹, E. Seidman¹, A. Bitton¹, T. Bessissow¹, P. Brassard¹, P.L. Lakatos\* PhD¹,² ¹Division of Gastroenterology, McGill University, Montreal, Canada, ²Department of Medicine I, Semmelweis University, Budapest, Hungary

Background: Chronic inflammatory diseases have been linked to increased risk of atherothrombotic events, but the risk associated