Methods: Data on medication prescription and phenotypic appearance in 513 individuals [ulcerative colitis (UC) n = 300, Crohn's disease (CD) n = 213] diagnosed in 2003–2004 with a follow-up time of 7 years were defined as baseline factors. Cumulative probabilities of recurrences were estimated and the association of baseline factors, medication use and time to first recurrence were examined by Cox regression.
Results: In CD the cumulative risk of first all type recurrence was 42%, 67% and 69% after 1, 5 and 7 years. 55% of the patients at risk had a second relapse within 2 years of the first and of these 53% had third relapse within one year of the second. The cumulative risk of medical relapses were 38%, 62% and 65% after 1, 5 and 7 years. There was a trend of a protective factor in having male gender (HR 0.73 95% CI: 0.51–1.04) and use of thiopurines (HR 0.69, 95% CI: 0.44–1.06) in medical relapses. Stricturing behaviour at diagnosis (HR 3.5; 95% CI: 3.5–7.2), use of systemic corticosteroids (HR 3.77; 95% CI: 1.17–12.15), thiopurines (HR 1.90 95% CI: 1.03–3.50) and anti-TNF agents (HR 2.37; 95% CI: 1.21–4.65) were associated with first surgical recurrence. Localization in the colon (HR 0.37; 95% CI: 0.18–0.72) and ileocolon (HR 0.41; 95% CI: 0.19–0.90) were protective. In UC the cumulative risk of first all type recurrence was 53%, 76% and 80% in 1, 5 and 7 years. The cumulative risk of a medical recurrence was 52%, 74% and 78% in 1, 5 and 7 years. Age above 40 was protective in first all type recurrence (HR 0.64; 95% CI: 0.49–0.84), in medical recurrence (HR 0.69; 95% CI: 0.52–0.90) and against colectomy (HR 0.49 95% CI: 0.22–1.09). Use of systemic corticosteroids in the first three months after diagnosis (HR 4.56; 95% CI: 2.09–9.95), use of thiopurines (HR 9.71; 95% CI: 4.58–20.57) and use of anti-TNF (HR 12.38; 95% CI: 4.33–35.37) were all significantly associated to risk of colectomy.
Conclusions: The cumulative risk of first all type recurrence has decreased in CD compared to previous studies but patients with a relapse are at risk of a second and third relapse. Stricturing behaviour, systemic corticosteroids, thiopurines and anti-TNF were associated with first surgical recurrence. In UC the cumulative recurrence rate was unaltered. Age above 40 was protective against any type of recurrence.

P598
Proton pump inhibitor use and risk of microscopic colitis – A nationwide Danish case–control study with 5751 cases

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Background: The etiology of microscopic colitis (MC) is unknown but it has been reported that drug consumption may increase the risk of MC. Proton pump inhibitor (PPI) may trigger or cause the disease. This presumptive association is based on small case–control studies. Based on Danish national registries we wanted to explore the potential association between exposure to PPI and the risk of MC.
Methods: All patients with a recorded diagnosis of either collagenous colitis (CC) or lymphocytic colitis (LC) in the Danish Pathology Register during the period January 2005 to December 2011 were identified. As controls 100 persons per case, matched on sex and age were randomly selected. None of the controls could have microscopic colitis. In the control group a subgroup of persons with a normal colonic biopsy were registered. The total sale of PPI in the study period expressed as defined daily dose (DDD)/1000 individuals/day was registered. For both cases and controls we also registered the individual PPI exposure from the Danish Prescription Registry in a one-year period preceding the case index date. Odds ratios of CC and LC according to prescription of PPI were calculated.
To assess the association between drug exposure and the risk of having an endoscopic examination with normal colonic biopsies, we compared PPI use within the control group with or without a colonic biopsy recorded.
Results: The cases consisted of 5751 patients, hereof 3474 (60%) with CC and 2277 (40%) with LC. In the seven-year period the annual incidence of diagnosed cases of CC increased from 7.2/100.000 to 14.9/100.000 and of LC from 4.1/100.000 to 9.8/100.000. The sale of PPI increased from 24.8 to 53.3 DDD/1000inhabitants/day.
Compared to controls the observed OR between PPI and both CC (OR 8.15; 95% CI: 7.60–8.73) and LC (OR 4.11; 95% CI: 3.77–4.49) were highly significant.
In our control group a total of 2202 persons – 1332 were selected as controls for CC and 820 for LC – were registered with a normal colonic biopsy in the Pathology Register.. The association between PPI exposure and having a normal biopsy was significant for both groups (OR 3.64; 95% CI: 3.25–4.08 and OR 3.77; 95% CI: 3.27–4.35, respectively). Incorporating the results from this subgroup in our final model attenuated the association between PPI exposure and risk of MC. It remained significant in case of PPI and CC (adjusted OR 2.03; 95% CI: 1.77–2.33) but disappeared for LC (adjusted OR 0.95; 95% CI: 0.80–1.12).
Conclusions: An association between intake of PPI and the diagnosis of MC was found. However, a strong association between PPI exposure and normal colon biopsies indicates bias due to more intense endoscopic surveillance. A role of PPI exposure and development of CC should be further explored.

P599
Prevalence of iron deficiency anemia and iron deficiency in a single center Turkish IBD cohort

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Background: Anemia is the most common complication of inflammatory bowel diseases (IBD). The prevalence of anemia reported in previous publications varies from 17% to 68%. In recent years, anemia in IBD has became one of the major interests as it effects the quality of life and outcome of treatments in IBD patients. The aim of this study was to analyse the prevalence of iron deficiency anemia and iron deficiency in an out-patient single centre IBD cohort.
Methods: We evaluated 398 consecutive IBD patients (Crohn's Disease (CD): 186 patients, Ulcerative Colitis (UC): 212 patients) admitted to our outpatients clinic. Demographic and clinical characteristics of each patient was evaluated and recorded. Hemoglobin and hematocrit levels, serum concentrations of iron, ferritin, vitamin B12 and serum CRP levels were recorded. Anaemia was defined as Hb <120 g/L, iron deficiency was defined as ferritin levels <20 and Vit B12 deficiency was defined as <200 mg/dl. Then, we analysed the prevalence of anemia and its predictors.
Results: The prevalence of anemia in our cohort of IBD patients was 22% in UC patients and 24% in CD patients. There was no significant difference in anemia prevalence between CD and UC. There was a trend for significance for the occurrence of anemia in UC extensive colitis when compared to ulcerative proctitis. Ileal involvement in CD was associated with a significantly higher rate of anemia. For iron deficiency without anemia, we found that 47% of UC patients and 41% of CD patients were experiencing iron deficiency without anemia. Vitamin B12 deficiency was observed as 10% and 17% of the patients respectively in UC and CD. In our cohort; 10% of UC patients and 29.6% of CD patients were receiving anti-TNF treatments. In addition; 21.5% of all IBD patients were receiving

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immune modulatory medicines. We observed no association with AZA or other medication.
Conclusions: In conclusion; The prevalence of anemia and iron deficiency in an out-patient IBD cohort was found to be relatively high. Anemia and iron deficiency were seemed to be associated with ileal involvment in CD, there was a trend towards significance in extensive colitis in UC.

P600
Prevalence of anemia in children with inflammatory bowel disease in Russian Federation

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Background: Anemia is a common complication of inflammatory bowel disease, although the reported prevalence of this condition has been markedly variable. However, the existing data in children are still limited. The aim of this study was to determine and analyze the prevalence of anemia for hospitalized children patients diagnosed with IBD in 2010–2013 years in Scientific Centre of Children Health in Moscow, Russia.
Methods: The study included 186 children diagnosed with IBD aged 6 months to 18 years (mean age was 12±4.6 years): 94 of them presented Crohn's disease (CD) and 92 – ulcerative colitis (UC). Patients were divided into 2 groups, anemic and non-anemic. Anemia was defined as an hemoglobin level lower than the normal value of the laboratory of our hospital (based on the World Health Organization criteria). The influence of type of IBD, age, gender, time from diagnosis, disease activity, undergoing treatment were evaluated.
Results: In all, one-third of patients with IBD were anemic. There was no significant difference in prevalence of anemia between CD (33%) and UC (29%) patients. Mean haemoglobin in the anemic UC and CD group was 9.6 (8.5–11.0) g/dL and 10.3 (9.3–10.6) g/dL respectively. Gender difference has not been observed among anemic IBD patients. Anemia was most common in children under 3 years of age (61%). The prevalence of anemia in older children and adolescents was 28%. Most patients with UC and CD had moderate form of anemia (71% with CD and 52% with UC). Anemia was more common at diagnosis than during follow-up (45% and 28%, respectively, P = 0.001). Disease activity scores (PUCAI; PCDAI) showed an inverse correlation with hemoglobin level. Patients with mild, moderate and severe UC disease activity were anemic in 19%, 44%, 62% cases respectively. The same inverse correlation was for CD. Compared with the IBD patients who received corticosteroid drugs, the children who received anti-TNF-a treatment (infliximab) with the same disease activity score had lower rates of anemia (55% vs. 37.5%).
Conclusions: Anemia was present in every third IBD patient and remains a frequently associated pathology to the inflammatory bowel disease, especially in infants and young children, that requires specific management.

P601
Prevalence of anemia in Serbian patients with inflammatory bowel disease

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Background: Anemia is very common in patients with inflammatory bowel disease (IBD). Anemia in IBD is complex and commonly represents a particular example of the combination of iron deficiency anemia and anemia of chronic diseases. Other causes of anemia such as vitamin B (12) and folate deficiency is the third common type of anemia that is frequently seen in Crohn's disease (CD), while haemolysis and various other causes like anemia induced by drugs (sulfasalazine, thiopurines) occur less frequantly in IBD patients [1]. However, the reported prevalence of anemia has been markedly variable, ranges from 16% to 74% [2].
The aim of this prospective study was to analyze the association between different types of anemia and IBD in Serbian tertiary referral center.
Methods: We carried out a prospective study from June 2009 to October 2013, including 301 consecutive IBD patients (M 143). Serum levels of hemoglobin, mean corpuscular volume, ferritin, transferrin saturation, folic acid, vitamin B (12), lactate dehydrogenase, haptoglobin, and C-reactive protein were analyzed in all patients with IBD. The hemoglobin levels were considered according to gender.
Results: 171 patients with ulcerative colitis (UC) and 130 patients with CD, mean age 41±15 years (range 18–76), were enrolled. The prevalence of anemia in total IBD patients was 81% (84% for UC and 78% for CD). 89% (134) of female patients with IBD had anemia, and 77% (110) of males.
Among the 244 anemic IBD patients 206 had active disease and 38 non active disease.
Most of our patients with anemia had iron deficiency anemia, serum ferritin was low in 57% (139), anemia of chronic diseases was present in 34% (72) and folic acid was low in 10% (25). Vitamin B (12) deficiency was present in patients with CD 3% (8), while most patients with vitamin B (12) abnormalities had a prior ileal or ileocolonic resection 75% (6).
Conclusions: Anemia is a frequent complication in Serbian patients with IBD. In our study 81% IBD patients had anemia, and more than half of these patients had iron deficiency anemia. Vitamin B (12) abnormalities are common in CD patients with prior ileal or ileocolonic resection. Our results suggest that iron deficiency is the main cause of anemia in IBD patients.

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P602
Prevalence of inflammatory bowel disease in patients with spondyloarthritis and psoriasis. The AQUILES study

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Objectives: To describe the baseline prevalence of inflammatory bowel disease (IBD) in the spondyloarthritis (SpA) and psoriasis cohorts of the AQUILES study (a 2-year observational study on 3 independent cohorts of patients with IBD, SpA or

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