Abstract P718 – Table 1. Description of studies comparing South Asians and Caucasian incidence in ulcerative colitis and Crohn's disease

Study	Country (region)	Study period	Number of cases	Incidence rate/100,000		Diagnosis based on recognised criteria	Ethnicity reporting method	Sample frame
				SA	Caucasian			
ULCERATIVE COLITIS								
Probert (1992)	UK (Leicester)	1972-1989	1003	10.8	5.3	No	Surname	Population
Jayanthi (1992)	UK (East London)	1972-1989	112	1.8	6.2	No	Medical records	Hospital
Mayberry (1999)	UK (Leicester)	1991-1994	74	17.2	9.1	Yes	Self-reported	Population
Pinsk (2007)	Canada (Vancouver)	1985-2005	120	6.4	3.7	No	Medical records	Hospital
CROHN'S DISEASE								
Fellow (1985)	UK (Derby)	1966-1985	221	4.4	7.5	No	Self-reported	Hospital
Probert (1992)	UK (East London)	1970-79	45	1.2	3.8	Yes	Medical records	Hospital
		1980-89	54	2.3	3.8			
Jayanthi (1992)	UK (Leicester)	1972-1980	80	1.2	3.5	Yes	Surname	Population
		1981-1989	104	3.1	5.3			
Pinsk (2007)	Canada (Vancouver)	1985-2005	397	6.7	1.0	Yes	Self-reported	Hospital

sessment of the studies was performed by examining the number of studies which fulfilled the following criteria: use of recognised diagnostic criteria, self-reporting of ethnic background and whether the study was population based. The p-value from the test of heterogeneity is given, with the I2 value. Size of difference between both groups is reported as a rate ratio, along with corresponding confidence intervals. This is quantified as the incidence in SA relative to the incidence in Caucasians.

Results: Eight studies met the inclusion criteria for Crohn's disease (CD) and Ulcerative Colitis (UC), seven in the UK and one study in Canada (Table 1). The total population was 2,569,074. The UC incidence was higher in SA in 3/4 studies with a rate ratio of UC 1.39 (0.84, 2.32) whereas CD incidence was lower in 5/6 CD studies with a rate ratio of 0.78 (0.22, 2.78) compared with Caucasians (Table 2). There was significant heterogeneity between both UC and CD studies. (I2 – 83%, p<0.001 and I2 – 95%, p<0.001).

Table 2. Summary statistic of incidence studies showing rate ratio of South Asians to Caucasians

Disease	Number of Studies	Heterogeneity		Effect size	
		I2	P-value	Rate Ratio (95% CI)	P-value
Crohn's Disease	6	95%	<0.001	0.78 (0.22, 2.78)	0.7
Ulcerative Colitis	4	83%	0.001	1.39 (0.84, 2.32)	0.2

Conclusions: There is a lack of good quality recent data in the literature. One UC study reported a lower incidence rate (Jayanthi) but only studied the Bangladeshi subgroup of the SA population whereas the others reported on a predominantly North Indian population. This finding suggests a difference in the presentation of IBD within the SA population. One study showed a higher incidence of CD in SA group than Caucasians which included a paediatric population. Early environmental influences may be more important for the pathogenesis of CD than UC. We conclude that SA migrants have increased risk of developing UC potentially due to exposure to new environmental factors in the adopted country. Larger prospective population based studies are needed to support these findings including differences between first and second generation migrants to implicate the environmental exposure.

P719
Determinants of tobacco consumption in the Swiss IBD cohort

M. Grueber*[1], C. Clair Willi[2], M. Allez[3], L. Biedermann[4], N. Fournier[5], A. Schöpfer[6], S. Vavricka[7], P. Juillerat[8], A.J. Macpherson[9]

[1] Inselspital, Bern, Department of Gastroenterology, Bern, Switzerland; [2] CHUV, PMU, Lausanne, Switzerland; [3] Hôpital Saint-Louis, Gastroenterology, Lausanne, France; [4] Universitätsspital, Gastroenterology, Zürich, Switzerland; [5] CHUV, Statistics, Lausanne, Switzerland; [6] CHUV, Gastroenterology, Lausanne, Switzerland; [7] Stadtspital Triemli, Gastroenterology, Zürich, Switzerland; [8] Inselspital, Gastroenterology, Bern, Switzerland; [9] Inselpital, Gastroenterology, Bern, Switzerland

Background: Tobacco consumption is an important environmental factor in inflammatory bowel diseases (IBD). Our aim was to identified characteristics associated with smoking in Crohn's disease (CD) and Ulcerative colitis (UC).

Methods: Adult UC and CD patients included in the Swiss IBD cohort study (SIBDCS) from Nov. 2006 to Nov. 2015 were asked about their smoking status. Patients were separated in two groups (active smokers vs. non-smokers). A logistic regression analysis was performed with smoking as main outcome.

Results: 999 UC and 1386 CD patients were included in the study. In the univariate analysis, smoking was positively associated with the female gender in CD patients. Smoking CD patients had more stenosis and used significantly more oral Budesonide, whereas UC patients used more topical treatments. A high anxiety and depression score was significantly associated with smoking among CD patients. The use of invalidity insurance was significantly higher in smoking UC and CD patients in the univariate analysis and was confirmed in the multivariate analysis (OR 1.8 [1.1–3.0], p=0.02 for UC and OR 3.4 [1.3–9.1], p=0.015 for CD).

Conclusions: After adjustment for disease pattern and activity, the only factor significantly associated with tobacco consumption in IBD patients is the need for invalidity insurance.

This positive association between active smoking and invalidity insurance is, however, not specific to IBD patients but also known in the Swiss population

P720
Use of proton pump inhibitors associated with a markedly increased risk of microscopic colitis

O. Bonderup*[1], G. Lauge Nielsen[2], M. Dall[3], A. Pottegård[3], J. Hallas[3]

[1] University Research Clinic for Innovative Patient Pathways, Aarhus University, Denmark, Diagnostic Centre, Section of Gastroenterol-