

Supplemental Material

Table 4: Phenotypic characteristics of the IBD patients by ancestry

Group	Non-Jewish	Jewish
Unaffected (n)	1636	1036
Male / female (%)	749/887 (45.8/54.2)	485/551 (46.8/53.2)
Age, mean \pm s.d. (range)	43.9 \pm 11.7 (17-83)	56.4 \pm 11.7 (15-97)
CD (n)	1304	669
Male / female (%)	589/715 (45.2/54.8)	344/325 (51.4/48.6)
Age, mean \pm s.d. (range)	39.8 \pm 14.7 (6-85)	43.7 \pm 15.5 (9-100)
Age at diagnosis, mean \pm s.d. (range)	23.3 \pm 10.4 (1-80)	21.3 \pm 10.9 (2-67)
UC (n)	1037	189
Male / female (%)	524/513 (50.5/49.5)	104/85 (55/45)
Age, mean \pm s.d. (range)	42.3 \pm 16.1 (4-90)	44.8 \pm 18.2 (12-84)
Age at diagnosis, mean \pm s.d. (range)	29.6 \pm 14.5 (2-82)	22.5 \pm 12 (3-77)
Age at diagnosis of CD (Montreal A)		
A1 <16 years	305 (23.4)	205 (30.6)
A2 17 – 40 years	821 (63)	295 (44.1)
A3 > 40 years	74 (5.7)	38 (5.7)
Age at diagnosis of UC (Montreal A)		
A1 <16 years	178 (17.2)	39 (20.6)
A2 17 – 40 years	611 (58.9)	99 (52.4)
A3 > 40 years	205 (19.8)	29 (15.3)
Disease behavior, CD (Montreal B)*		
B1 non-stricturing, non-penetrating	341 (26.2)	173 (25.9)
B2 stricturing	182 (14.0)	124 (18.5)
B3 penetrating - excludes perianal	264 (20.2)	141 (21.1)
Disease location, CD (Montreal L)		
L1 ileal	497 (38.1)	250 (37.4)
L2 colonic	98 (7.5)	57 (8.5)
L3 ileocolonic	637 (48.8)	345 (51.6)
Perianal only	6	1
Disease location, UC (Montreal E)		
E1 ulcerative proctitis	108 (10.4)	17 (9.0)
E2 left-sided UC (distal UC)	289 (27.9)	61 (32.3)
E3 extensive UC (pancolitis)	600 (57.9)	91 (4.8)

*values from case-control data

Table 5: Case-Control Cohort Additional Phenotypic Information

	CD	UC	Unaffected
Jewish, y/n (% yes)	471/799 (36.9)	90/807 (10)	765/825 (47.8)
Appendectomy, y/n (% yes)	441/481 (34.5)	170/704 (18.9)	48/528 (3)
Smokers			
No at diagnosis	774	607	379
Yes at diagnosis	258	91	71
Ex-smoker at diagnosis	102	190	131
Surgery for CD, y/n (% yes)	669/444 (52.4)		
Surgery for UC, y/n (% yes)		173/724 (19.2)	

Table 6: Logistic regression

	Odds Ratio (95% C.I.)	P value
Odds of IBD		
IRF5 Genotypes		
rs4728142 (A vs G)	0.68 (0.52-0.88)	0.004
Indel5 (A vs G)	0.92 (0.76-1.13)	0.44
rs7808907 (C vs T)	1.28 (1.02-1.61)	0.03
Odds of Ulcerative colitis		
IRF5 Genotypes		
rs4728142 (A vs G)	0.70 (0.52-0.94)	0.02
Indel5 (A vs G)	0.94 (0.74-1.18)	0.58
rs7808907 (C vs T)	1.34 (1.03-1.73)	0.03
Odds of Crohn's Disease		
IRF5 Genotypes		
rs4728142 (A vs G)	0.66 (0.51-0.92)	0.01
Indel5 (A vs G)	0.90 (0.72-1.12)	0.36
rs7808907 (C vs T)	1.44 (1.11-1.86)	0.006
NOD2 SNPs*		
1 or more risk alleles	2.68 (1.97-3.64)	<0.0001

*NOD2 SNPs include rs2066844, rs2066845 and rs2066847;

A multivariate logistic regression model to estimate the effects of the three polymorphisms; IBD, Crohn's and Ulcerative colitis, patients and controls were divided into subgroups according to risk allele counts. Individuals carrying no risk alleles for each of the 3 SNPs served as the reference groups. No significant associations were found when considering other features of clinical value.