

## Supplementary material

**Supplementary Table 1** Patient characteristics and risk factors in association with endoscopic and histologic inflammation.

Risk factors/patient level characteristics	Inactive (N = 599)	Mild (N = 242)	Moderate (N = 87)	Severe (N = 27)	P value
<b>Gender</b>					
<b>F</b>	236 (39.4%)	78 (32.2%)	38 (43.7%)	11 (40.7%)	0.158
<b>M</b>	363 (60.6%)	164 (67.8%)	49 (56.3%)	16 (59.3%)	
<b>Age at procedure</b>					
<b>Median (Q1, Q3)</b>	59.0 (45.0, 67.0)	55.0 (43.0, 64.0)	53.0 (42.5, 67.35)	42.0 (35.0, 58.5)	< 0.001
<b>Mean (SD)</b>	56.2 (14.5)	53.7 (14.3)	53.5 (15.5)	46.2 (16.8)	
<b>Years since IBD diagnosis</b>					
<b>Median (Q1, Q3)</b>	13.3 (7.8, 22.0)	12.7 (6.9, 21.0)	10.7 (5.4, 24.2)	10.3 (8.5, 14.3)	0.612
<b>Mean (SD)</b>	15.8 (11.3)	15.4 (11.6)	15.2 (13.3)	12.4 (6.7)	
<b>Age at diagnosis</b>					
<b>Median (Q1, Q3)</b>	39.0 (26.0, 52.0)	33.0 (25.0, 51.0)	38.0 (26.0, 50.2)	28.5 (20.8, 49.5)	0.437
<b>Mean (SD)</b>	39.3 (15.9)	37.1 (16.3)	38.5 (18.0)	35.7 (18.8)	
<b>Disease</b>					
<b>UC</b>	384 (64.6%)	167 (69.0%)	66 (75.9%)	17 (63.0%)	0.394

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<b>CD</b>	204 (34.3%)	74 (30.6%)	20 (23.0%)	10 (37.0%)	
<b>History of smoking at index procedure</b>					
<b>Yes</b>	53 (11.9%)	20 (10.8%)	11 (17.5%)	2 (9.5%)	0.541
<b>No</b>	394 (88.1%)	165 (89.2%)	52 (82.5%)	19 (90.5%)	
<b>PSC at index</b>					
<b>Yes</b>	82 (18.4%)	42 (22.6%)	21 (33.3%)	6 (28.6%)	0.036
<b>No</b>	82 (18.4%)	144 (77.4%)	42 (66.7%)	15 (71.4%)	
<b>History of random dysplasia at prior surveillance</b>					
<b>HGD</b>	7 (1.6%)	7 (3.8%)	1 (1.6%)	0 (0.0%)	0.319
<b>LGD</b>	69 (15.5%)	21 (11.4%)	8 (12.7%)	1 (4.8%)	
<b>No dysplasia</b>	370 (83.0%)	157 (84.9%)	54 (85.7%)	20 (95.2%)	
<b>Family History of CRC</b>					
<b>Yes</b>	111 (25.9%)	43 (24.4%)	12 (21.4%)	4 (21.1%)	0.863
<b>No</b>	318 (74.1%)	133 (75.6%)	44 (78.6%)	15 (78.9%)	
<b>Patient characteristics in association with histologic inflammation</b>					
<b>Risk factors/patient level characteristics</b>	<b>Inactive (N = 567)</b>	<b>Mild (N = 301)</b>	<b>Moderate (N = 82)</b>	<b>Severe (N = 3)</b>	<b>P value</b>
<b>Gender</b>					
<b>Female</b>	230 (40.6%)	107 (35.5%)	29 (35.4%)	0 (0.0%)	0.226

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<b>Male</b>	337 (59.4%)	194 (64.5%)	53 (64.6%)	3 (100.0%)	
<b>Age at procedure</b>					
<b>Median (Q1, Q3)</b>	59.0 (46.0, 67.0)	55.0 (42.0, 66.0)	49.5 (37.0, 66.2)	37.0 (33.0, 42.5)	<b>&lt;0.001</b>
<b>Mean (SD)</b>	56.4 (14.1)	53.7 (15.1)	50.9 (16.4)	38.0 (9.5)	
<b>Years since IBD diagnosis</b>					
<b>Median (Q1, Q3)</b>	13.3 (7.5, 21.4)	12.7 (6.5, 22.1)	11.5 (6.9, 18.6)	12.2 (7.8, 16.7)	0.883
<b>Mean (SD)</b>	15.6 (11.2)	15.6 (12.1)	14.5 (10.8)	12.2 (12.7)	
<b>Age at diagnosis</b>					
<b>Median (Q1, Q3)</b>	39.0 (26.0, 53.0)	35.0 (25.0, 48.2)	36.0 (22.2, 51.0)	26.0 (25.5, 26.5)	0.268
<b>Mean (SD)</b>	39.4 (16.0)	37.1 (16.4)	37.8 (17.2)	26.0 (1.4)	
<b>Disease</b>					
<b>UC</b>	373 (66.5%)	194 (64.5%)	61 (74.4%)	3 (100.0%)	0.400
<b>CD</b>	182 (32.4%)	106 (35.2%)	20 (24.4%)	0 (0.0%)	
<b>History of smoking at index</b>					
<b>Yes</b>	47 (11.3%)	28 (11.9%)	11 (17.7%)	0 (0.0%)	0.493
<b>No</b>	369 (88.7%)	208 (88.1%)	51 (82.3%)	2 (100.0%)	
<b>PSC at index</b>					
<b>Yes</b>	79 (19.0%)	54 (22.9%)	15 (24.2%)	2 (100.0%)	<b>0.025</b>
<b>No</b>	336 (81.0%)	182 (77.1%)	47 (75.8%)	0 (0.0%)	
<b>History of random dysplasia in prior surveillance</b>					
<b>HGD</b>	6 (1.4%)	9 (3.8%)	0 (0.0%)	0 (0.0%)	0.115

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<b>LGD</b>	53 (12.8%)	41 (17.4%)	6 (9.7%)	0 (0.0%)	
<b>No dysplasia</b>	356 (85.8%)	186 (78.8%)	56 (90.3%)	2 (100.0%)	
<b>Family history of CRC</b>					
<b>Yes</b>	100 (25.1%)	52 (23.2%)	13 (22.8%)	0 (0.0%)	0.801
<b>No</b>	298 (74.9%)	172 (76.8%)	44 (77.2%)	2 (100.0%)	

SD, standard deviation; IBD, inflammatory bowel disease; UC, ulcerative colitis; CD, Crohn's disease; PSC, primary sclerosing cholangitis; HGD, high-grade dysplasia; LGD, low-grade dysplasia; CRC, colorectal cancer.

**Supplementary Table 1** Degrees of histologic inflammation. **a** Mild inflammation with neutrophils in epithelium. **b** Moderate inflammation with a crypt abscess. **c** Severe inflammation with multiple crypt abscesses.

