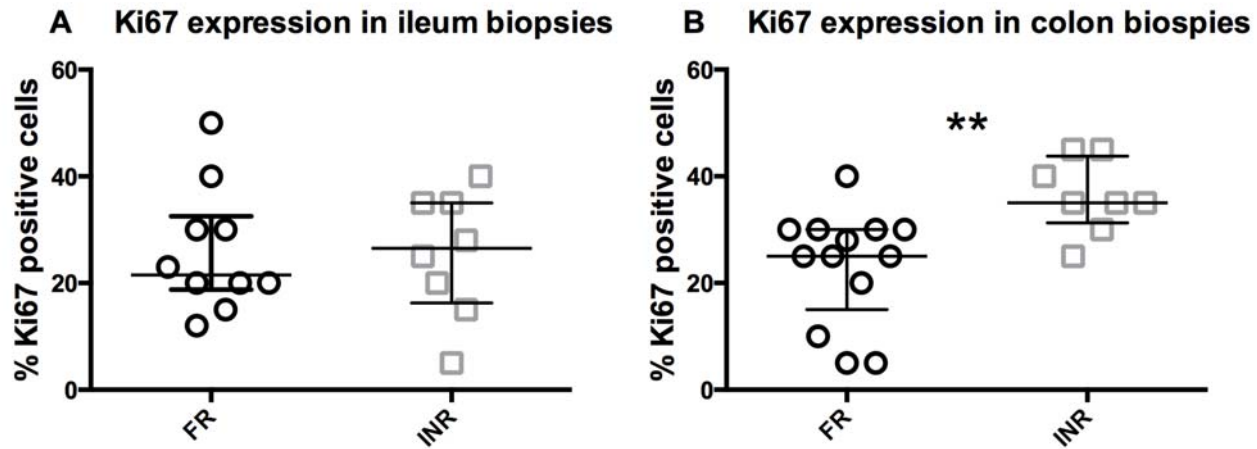


Supplemental Digital Content 1. Endoscopic and histological findings in INR and FR study subjects

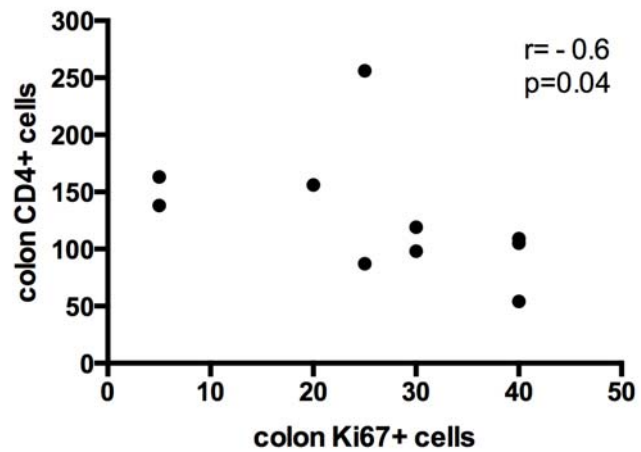
Patient	Group	Macroscopic examination	Ileum Histology	Colon/rectum Histology
1	INR	Normal	Acute and chronic low grade inflammation in the LP Lympho-follicular hyperplasia	Chronic low grade inflammation in the LP Lymphofollicular hyperplasia (colon)
2	INR	Sigmoid colon diverticular disease	Acute and chronic low grade inflammation in the LP	Acute and chronic low grade inflammation in the LP
3	INR	Ascending colon polyp	Acute and chronic low grade inflammation in the LP Lymphofollicular hyperplasia Polyp: tubular adenoma with low-grade dysplasia	Acute and chronic moderate grade inflammation in the LP Eosinophilic elements (colon)
4	INR	Normal	Acute and chronic low grade inflammation in the LP	Acute and chronic low grade inflammation in the LP <i>Muscularis mucosae</i> fibrosis, inflammatory polyp (colon)
5	INR	Low grade chronic active colitis	Chronic low grade inflammation in the LP	Chronic inflammation in the LP
6	INR	Normal	Chronic inflammation in the LP Few superficial erosions	Chronic low grade inflammation in the LP Focal gland distortion (colon)
7	INR	Ileocecal sphincter flat polyp	Chronic low grade inflammation in the LP Polyp: tubular adenoma with low-grade dysplasia	Chronic low grade inflammation in the LP
8	INR	Normal	Chronic moderate grade inflammation in the LP	Chronic moderate grade inflammation in the LP
9	FR	Normal	Chronic low grade inflammation in the LP Lymphofollicular hyperplasia	Chronic low grade inflammation in the LP Lymphofollicular hyperplasia (colon)
10	FR	Transverse colon polyp	Chronic low grade inflammation in the LP Lymphofollicular hyperplasia Polyp: tubular adenoma with low-grade dysplasia	Acute and chronic low grade inflammation in the LP
11	FR	Normal	Chronic low grade inflammation in the LP	Acute and chronic low grade inflammation in the LP
12	FR	Colon polyps	Chronic low grade inflammation in the LP Polyps: 2 tubular adenomas with low-grade dysplasia	Chronic moderate grade inflammation in the LP
13	FR	Right hepatic flexure flat polyp	Acute and chronic low grade inflammation in the LP Lymphofollicular hyperplasia Polyp: tubular adenoma with low grade dysplasia, focal high-grade dysplasia at the polyp's extremity	Acute and chronic low grade inflammation in the LP
14	FR	Descending colon diverticular disease	Acute and chronic low grade inflammation in the LP Lymphofollicular hyperplasia	Acute and chronic low-moderate grade inflammation in the LP
15	FR	Normal	Acute and chronic low grade inflammation in the LP Lymphofollicular hyperplasia	Acute and chronic moderate grade inflammation in the LP Eosinophilic elements, haematic congestion
16	FR	Normal	Chronic low grade inflammation in the LP	Chronic low-moderate grade inflammation in the LP Haematic congestion (rectum)
17	FR	Sigmoid colon diverticular disease	Acute and chronic low grade inflammation in the LP	Acute and chronic low grade inflammation in the LP
18	FR	External haemorrhoids plexus congestion	Chronic low grade inflammation in the LP Lymphofollicular hyperplasia	Acute and chronic low grade inflammation in the LP Lymphofollicular hyperplasia (colon)
19	FR	Right hepatic flexure pedunculated polyp	Chronic low grade inflammation in the LP Tubular-villous adenoma with low-grade dysplasia	Chronic low grade inflammation in the LP Glandular rarefactions and LP fibrosis (rectum)
20	FR	Normal	Chronic low grade inflammation in the LP Eosinophilic elements	Chronic moderate grade inflammation in the LP Eosinophilic elements (colon)
21	FR	Normal	Chronic low grade inflammation in the LP	Chronic inflammation in the LP Focal cryptitis (colon)

INR: Immunological Non Responder; FR: Full Responder. LP: Lamina propria

Supplemental Digital Content 2. Expression of Ki67 in gut biopsies and correlation with intestinal CD4+ T-cell counts.



C Correlation between colonic CD4+ cells and Ki67+ cells

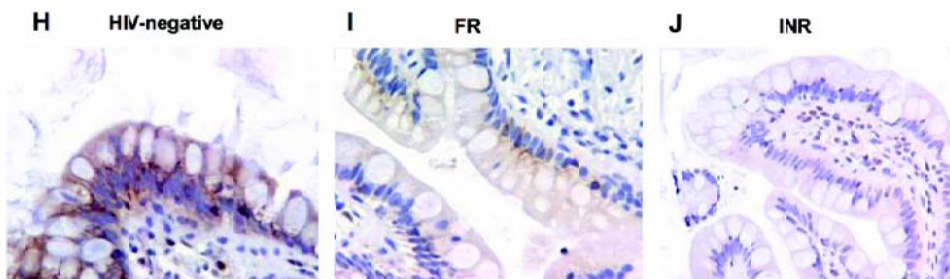
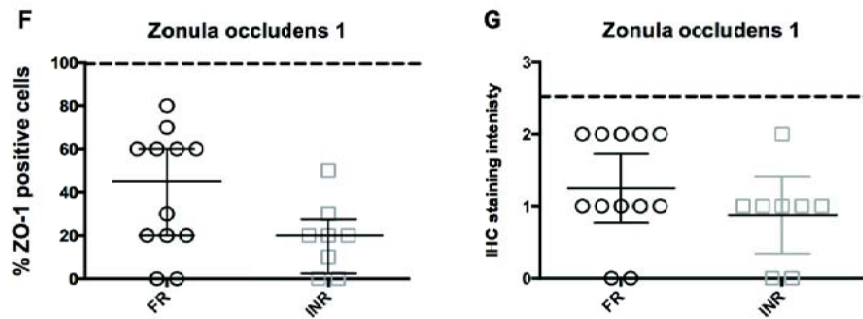
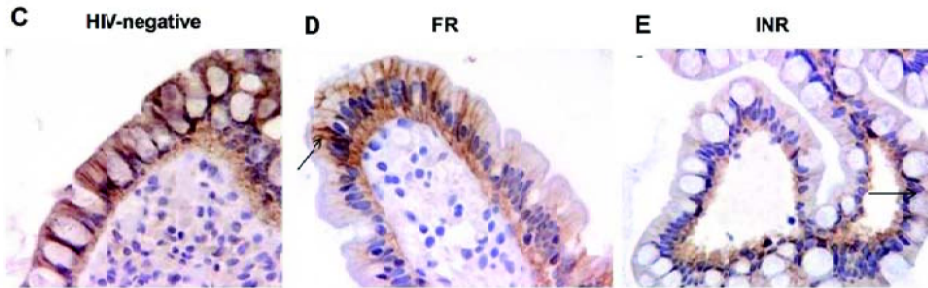
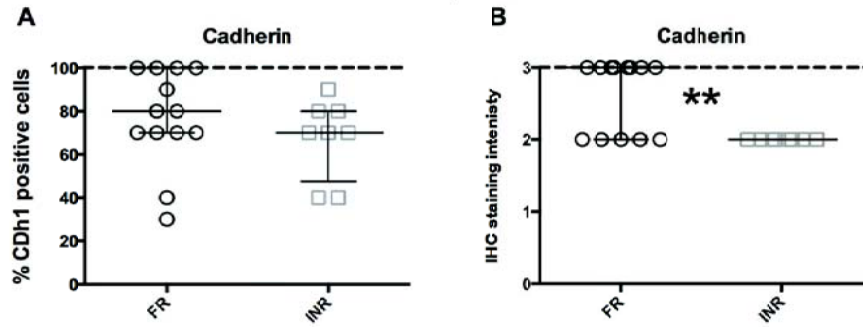


Supplemental Digital Content 3. Immunohistochemical study of Cadherin (CDh1) and Zonula occludens protein 1 (ZO-1) in ileum and colon biopsies

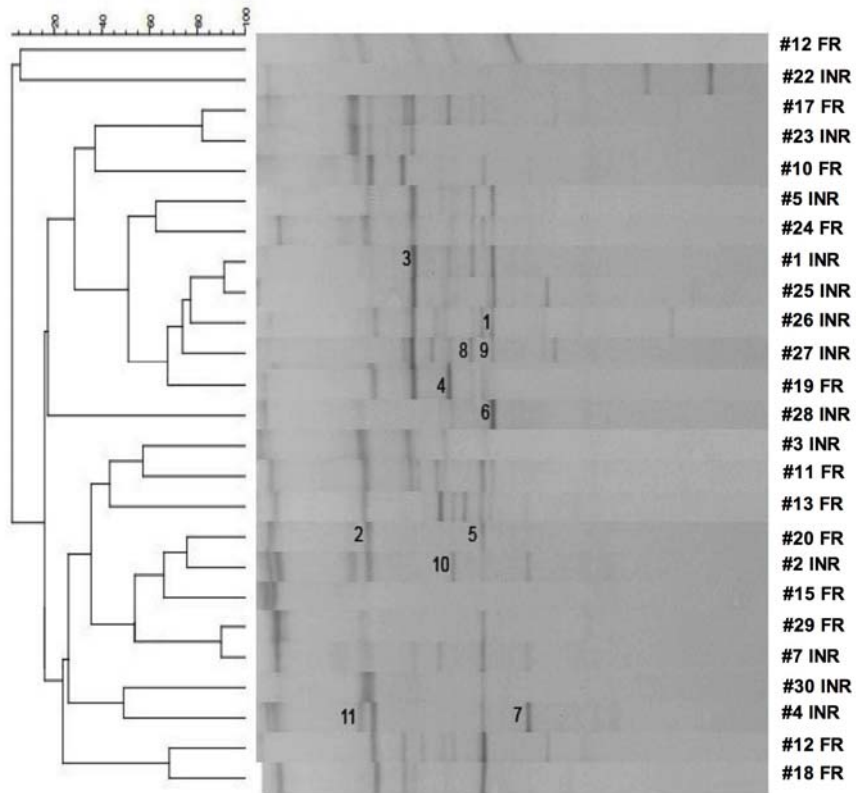
Patient	Group	Ileum						Colon					
		CDH1			ZO			CDH1			ZO		
		intensity	% positive cells	distribution	intensity	% positive cells	distribution	intensity	% positive cells	distribution	intensity	% positive cells	distribution
1	INR	2	70	basal	0	0		2	60	basal	0	0	
2	INR	2	70	basal	1	10	membrane	2	70	basal	1	10	membrane
3	INR	2	70	basal	1	20	membrane	2	60	baso-lateral	1	20	membrane
4	INR	2	90	basal	1	30	cytoplasm	2	80	basal	0	0	N.A.#
5	INR	2	80	basal	0	0	N.A.	2	80	baso-lateral	0	0	N.A.#
6	INR	2	40	basal	1	20	cytoplasm	2	30	basal	1	30	cytoplasm
7	INR	2	40	basal	1	20	cytoplasm	2	60	baso-lateral	0	0	N.A.
8	INR	2	80	basal	2	50	cytoplasm	2	40	basal	2	60	cytoplasm
9	FR	2	30	basal	1	60	paranuclear	3	90	baso-lateral	1	40	paranuclear
10	FR	3	100	circumferential	1	20	membrane	3	100	circumferential	1	30	membrane
11	FR	2	80	basal	0	0	N.A.	3	90	basal	0	0	N.A.
12	FR	3	100	circumferential	2	80	membrane	3	100	circumferential	2	90	cytoplasm
13	FR	3	80	basal	2	70	cytoplasm	3	100	circumferential	2	90	membrane
14	FR	3	100	baso-lateral	1	20	cytoplasm	2	90	baso-lateral	2	70	cytoplasm
15	FR	3	100	baso-lateral	1	20	cytoplasm	3	100	baso-lateral	0	0	N.A.
16	FR	2	70	baso-lateral	2	60	paranuclear	3	80	baso-lateral	2	60	paranuclear
17	FR	3	90	baso-lateral	N.A.	N.A.	N.A.	3	80	baso-lateral	0	0	N.A.
18	FR	3	70	baso-lateral	0	0	membrane	3	100	baso-lateral	1	20	cytoplasm
19	FR	2	70	baso-lateral	2	30	membrane	2	30	baso-lateral	2	40	cytoplasm
20	FR	2	70	baso-lateral	1	60	membrane	2	60	circumferential	1	80	membrane
21	FR	3	40	baso-lateral	2	60	membrane	2	30	baso-lateral	2	30	cytoplasm

A semi-quantitative score was used for the study of intestinal junction proteins, by evaluating: a) the reaction intensity of stained epithelial cells of colon and ileum (0 = no staining , 1 = weak staining , 2 = intermediate staining , 3 = intense staining); b) the percentage of positive cells, by counting stained cells on 100 superficial intestinal cells at high magnification (40x); c) subcellular localization (membranous as complete, lateral, basal, baso-lateral; cytoplasmic; para-nuclear). INR: Immunological Non Responder; FR: Full Responder.

Supplemental Digital Content 4. Expression of junctional complex proteins in ileum biopsies



Supplemental Digital Content 5. A hierarchial cluster analysis of the DGGE profiles of the *Bacteroides-Prevotella* group



Band number	% of BLAST similarity	Nearest species	Accession number	Presence in INR (%)	Presence in FR (%)
1	99	<i>Prevotella copri</i>	NR040877.1	21	17
2	100	<i>Bacteroides dorei</i>	NR041351.1	57	75
3	98	<i>Prevotella copri</i>	NR040877.1	57	42
4	99	<i>Prevotella copri</i>	NR040877.1	0	8
5	100	<i>Bacteroides uniformis</i>	NR040866.1	43	92
6	99	<i>Bacteroides intestinalis</i>	NR041307.1	28	0
7	100	<i>Bacteroides uniformis</i>	NR040866.1	14	17
8	99	<i>Prevotella copri</i>	NR040577.1	28	25
9	95	<i>Prevotella copri</i>	NR040877.1	14	17
10	99	<i>Bacteroides intestinalis</i>	NR041307.1	7	0
11	97	<i>Bacteroides vulgatus</i> <i>Bacteroides thetaiotamicron</i>	NR074515.1 NR074277.1	28	25