SUPPLEMENTARY TABLES

Supplementary Table 1: Differences in body composition parameters between the inflammatory bowel disease and healthy control populations

Body composition parameters	Cohort with Inflammatory Bowel Disease (n = 141)	Healthy controls (n = 51)	p-value
Female Gender [n (%)]	76 (56.6)	28 (54.9)	0.86
Age [Mean in years (SD)]	40 (17)	40 (17)	0.74
Total Mass [Mean in Kg (SD)]	81.6 (21)	84.5 (22.7)	0.32
Body Mass Index [Mean in Kg/m^2 (SD)]	28.3 (6.9)	29.0 (7.1)	0.37
Percentage of body fat (Mean % (SD))	35.0 (10.5)	35.3 (10.3)	0.86
Total Adipose Mass [Mean in Kg (SD)]	29.6 (14.4)	30.8 (15.8)	0.65
Total IA-VAT[1] Mass [Mean in Kg (SD)]	938 (336-1742)	807 (353-1553)	0.58
IA-VAT[1] % [Mean in % (SD)]	1.32 (0.98)	1.20 (0.14-0.89)	0.44
Total Lean Mass [mean in Kg (SD)]	48.3 (11)	50.1 (11.3)	0.33

(1) IA-VAT: Intra-abdominal Visceral Adipose Tissue

Supplementary Table 2: Differences in body composition parameters between the patients with a diagnosis of Crohn's disease vs. ulcerative colitis

Body composition parameters	Crohn's disease (n = 79)	Ulcerative Colitis (n = 62)	p-value
Total Mass [Mean in Kg (SD)]	82.15 (22.37)	80.93 (18.92)	0.73
Body Mass Index [Mean in Kg/m^2 (SD)]	28.74 (7.57)	27.70 (5.84)	0.37
Percentage of Body Fat [Mean in % (SD)]	35.80 (10.4)	34.00 (10.6)	0.31
Total IA-VAT[1] Mass [Mean in Kg (SD)]	1.24 (1.09)	1.15 (1.05)	0.61
Total Fat Mass [Mean in % (SD)]	10.86 (5.7)	10.02 (5.3)	0.53
IA-VAT[1] % [Mean in % (SD)]	1.36 (0.98)	1.27 (0.99)	0.61
Total Lean Mass [Mean in Kg (SD)]	48.03 (10.4)	49.11 (11.5)	0.56

(1) IA-VAT: Intra-abdominal Visceral Adipose Tissue

Supplementary Table 3: Differences in body composition parameters based on baseline steroid use.

Body composition parameters	On Steroids at Baseline (n=94)	Not on Steroids at Baseline (n=47)	p-value
Total Mass [Mean in Kg (SD)]	80.67 (20.14)	83.50 (22.34)	0.450
Body Mass Index [Mean in Kg/m² (SD)]	27.87 (5.89)	29.12 (8.48)	0.307
Percentage of Body Fat [Mean in % (SD)]	35.33 (9.33)	34.37 (12.55)	0.609
Total IA-VAT[1] Mass [Mean in Kg (SD)]	1.18 (1.07)	1.24 (1.07)	0.752
Total Fat Mass [Mean in % (SD)]	29.12 (12.57)	30.67 (17.62)	0.550
IA-VAT[1] % [Mean in % (SD)]	1.32 (1.0)	1.31 (0.97)	0.940
Total Lean Mass [Mean in Kg (SD)]	48.8 (11.63)	49.38 (9.21)	0.502

(1) IA-VAT: Visceral Adipose Tissue Mass.

Supplementary Table 4: Differences between those patients that did and did not achieve deep, steroid-free remission at week 30 (infliximab and vedolizumab) or week 32 (ustekinumab) of therapy.

	SFDR[1] at Week 30/32 (n=51)	No SFDR[1] at Week 30/32 (n=77)	p-value
Female gender [n (%)]	28 (54.6)	42 (54.6)	0.96
Age [Mean (SD)]	36.50 (15.85	42.8 (17.8	0.04*
Hispanic Ethnicity [n (%)]	3 (5.9)	3 (3.9)	0.6
Race [n (%)]			0.26
Caucasian	50 (98.0)	70 (90.9)	
African-American	None	6 (7.8)	
Asian	1 (1.3)	1 (1.3)	
Other	None	None	
Disease Type [n (%)]			0.23
Crohn's disease	25 (49.02)	46 (59.74)	
Ulcerative colitis	26 (51.0)	31 (40.26)	
Active Smoker [n (%)]	4 (7.8)	8 (10.4)	0.63
Years with inflammatory bowel disease [Median in years (IQR[1])]	5 (1-13)	6 (2-13)	0.4
Phenotype of Crohn's disease[3]			
Location [n (%)]			0.532
L1: Ileal	3 (12.0)	12 (26.1)	
L2: Colonic	5 (19.6)	9 (20.0)	
L3: Ileocolonic	17 (68.0)	25 (54.4)	
L4: Upper Gastrointestinal tract involvement [n (%)]	2 (8.0)	4 (8.7)	1.00
B1: Not stricturing, non-penetrating [n (%)]	13 (52.0)	19 (41.30)	0.61
B2: Stricturing [n (%)]	7 (28)	21 (45.65)	0.225
B3: Penetrating [n (%)]	5 (20.0)	10 (21.74)	1.00
Phenotype of Ulcerative Colitis[4]			
Location [n (%)]			0.545
L1: Ileal	1 (4.00)	0 (0)	
L2: Colonic	6 (24.00)	9 (30.0)	
L3: Ileocolonic	19 (73.1)	21 (70.0)	
Body Composition Parameters at Baseline			
Total Mass [Mean in Kg (SD)]	72.56 (16.3)	86.63 (20.73)	<0.001*
Body Mass Index [Mean in Kg/m² (SD)]	24.9 (4.26)	30.14 (7.2)	<0.001*
Percentage of Body Fat [Mean in % (SD)]	30.06 (9.8)	37.75 (10.01)	<0.001*
Total IA-VAT[5] Mass [Mean in Kg (SD)]	0.64 (0.56)	1.53 (1.16)	<0.001*

Total Fat Mass [Mean in % (SD)]	22.3 (10.51)	33.63 (14.6)	<0.001*
IA-VAT[5] percentage of total body mass [Mean in % (SD)]	0.79 (0.57)	1.63 (1.1)	<0.001*
Total Lean Mass [Mean in Kg (SD)]	47.05 (10.8)	49.5 (10.8)	0.21
Medications at Baseline and Previous Exposure			
Previous Use of Biologic [n (%)]	28 (52.08)	56 (72.7)	0.038*
Biologic started [n (%)]			0.15
Infliximab	22 (43.1)	23 (29.9)	
Ustekinumab	12 (23.5)	30 (39.0)	
Vedolizumab	17 (33.3)	24 (31.2)	
Receiving steroids at baseline [n (%)]	31 (60.8)	57 (74.03)	0.114
Use 5-aminosalicilates [n (%)]	5 (9.8)	4 (5.2)	0.32
Receiving combination therapy with immunomodulator [n (%)]	21 (41.18)	34 (44.16)	0.74
Receiving a thiopurine for combination therapy [n (%)]	19 (37.25)	24 (31.2)	0.48
Receiving a methotrexate for combination therapy [n (%)]	5 (9.8)	10 (13.00)	0.58
Baseline Disease Activity			
Simple Endoscopic Score-CD[3] [Median (IQR)]	12 (8-17)	9 (8-15)	0.45
Harvey Bradshaw Index[3] [Median (IQR)]	5 (2-7)	5 (3-8)	0.3
Partial Mayo Score[4] [Median (IQR)]	5 (4-7)	5 (4-6)	0.62
Endoscopic Mayo Score[4] [n (%)]			0.49
2	13 (52)	19 (61.3)	
3	12 (48)	12 (48.0)	
Baseline C-Reactive Protein [median in mg/dL (IQR)]	0.3 (0.1-0.8)	0.7 (0.3-1.3)	0.003*
Baseline Albumin [Mean in mg/dL (SD)]	4.2 (0.44)	4.11 (0.48)	0.16
Baseline Fecal Calprotectin[6] [Median in µg/mg(IQR)]	565 (207-1116)	951 (360-2500)	0.07
Was dose escalated through week 30/32 [n (%)]	6 (12.5)	13 (17.1)	0.49
Drug level week 30/32 in the highest two quartiles[7] [n (%)]	33 (70.2)	22 (34.9)	<0.001*
Infliximab pharmacokinetics[8]			
Infliximab drug levels week 30 [median in mg/dL (IQR)]	17.2 (14.1-20.1)	12 (4.7-17.4)	0.049*
Detectable anti-infliximab antibodies [n (%)]	1 (5.3)	2 (10.5)	0.55
Vedolizumab pharmacokinetics[8]			
Vedolizumab drug levels week 30 [median in mg/dL (IQR)]	14 (7.1-16.2)	8.4 (3.5-32.9)	0.13
Detectable anti-vedolizumab antibodies [n (%)]	None	None	N/A
Ustekinumab pharmacokinetics[8]			
Ustekinumab drug levels week 32 [median in mg/dL (IQR)]	7.6 (5.7-11.9)	4.7 (2-6.3)	0.013*
Detectable anti-ustekinumab antibodies [n (%)]	None	None	N/A

(1) Steroid-free deep remission
(2) Interquartile range
(3) Applies to patients with Crohn's disease
(4) Applies to patients with ulcerative colitis
(5) IA-VAT: Intra-abdominal Visceral Adipose Tissue.
(6) 70 patients in the cohort had baseline fecal calprotectin performed
(7) Stratified by each biologic
(8) As applicable based on the drug the patient was on
(*) Statistically significant

Supplementary Table 5: Differences in characteristics among patients that started infliximab and did and did not achieve steroid free deep remission at week 14.

Characteristics of patients receiving starting infliximab	Achieved SFDR[1] at week 14 (n = 17)	Did not achieve SFDR[1] at week 14 (n = 35)	p-value
Female gender [n (%)]	10 (58.82)	23 (65.71)	0.628
Age [mean in years [SD])	33.12 (11.2)	41.40 (18.4)	0.095
Hispanic ethnicity [n (%)]	None	3 (8.6)	0.21
Race [n (%)]			0.44
Caucasian	15 (88.2)	33 (94.3)	
African-American	2 (11.76)	2 (5.7)	
Asian	None	None	
Other	None	None	
Disease Type [n (%)]			0.457
Crohn's disease	12 (70.6)	21 (60.0)	
Ulcerative colitis	5 (29.4)	14 (40.0)	
Active smoker at baseline [n (%)]	5 (29.4)	2 (5.7)	0.002*
Years with IBD [Median in years (IQR[2])]	4 (1-13)	5 (1-10)	0.99
History of bowel resection [n (%)]	1 (5.9)	1 (2.9)	0.60
Phenotype of Crohn's disease[3]			
Location [n (%)]			0.531
L1: Ileal	2 (16.7)	5 (23.8)	
L2: Colonic	1 (8.3)	5 (23.8)	
L3: Ileocolonic	9 (75.0)	11 (52.4)	
L4: Upper Gastrointestinal tract involvement [n (%)]	1 (8.3)	2 (9.5)	1.00
B1: Not stricturing, non-penetrating [n (%)]	7 (58.3)	12 (57.1)	1.00
B2: Stricturing [n (%)]	None	7 (33.3)	0.032*
B3: Penetrating [n (%)]	4 (33.3)	3 (14.3)	0.377
Phenotype of Ulcerative Colitis[4]			
Ulcerative Colitis Extension [n (%)]			0.013*
Proctitis	None	None	
Left-sided Colitis	None	9 (64.3)	
Pan-colitis	5 (100)	5 (35.7)	
Body Composition Parameters at Baseline			
Total Mass [Mean in Kg (SD)]	69.0 (16.0)	86.47 (23.2)	0.007*
Body Mass Index [Mean in Kg/m^2 (SD)]	24.5 (4.8)	30.1 (7.7)	0.009*
Percentage of Body Fat [Mean in % (SD)]	27.8 (10.3)	38.2 (10.2)	0.001*
Total IA-VAT[5] Mass [Mean in Kg (SD)]	0.63 (0.51)	1.40 (1.13)	0.010*
Total Fat Mass [Mean in % (SD)]	19.7 (10.6)	34.3 (15.2)	<0.001*
IA-VAT[5] percentage of total body mass [Mean in % (SD)]	0.84 (0.54)	1.46 (0.99)	0.021*
Total Lean Mass [Mean in Kg (SD)]	46.3 (10.7)	48.6 (11.0)	0.466
Medications at Baseline and Previous Exposure			
Previous Use of Biologic [n (%)]	6 (35.3)	23 (65.7)	0.038*
Receiving steroids at baseline [n (%)]	10 (58.8)	25 (71.4)	0.363
Use 5-aminosalicilates [n (%)]	1 (5.88)	4 (11.43%)	1.00
Receiving combination therapy with immunomodulator [n (%)]	8 (47.1)	24 (68.6)	0.135
Receiving a thiopurine for combination therapy [n (%)]	7 (41.2)	22 (62.9)	0.140
Receiving a methotrexate for combination therapy [n (%)]	2 (11.8)	3 (8.6)	1.00
Baseline Disease Activity			

Simple Endoscopic Score-CD[3] [Median (IQR[2])]	16 (10-21)	8 (7-14)	0.026*
Harvey Bradshaw Index[3] [Median (IQR[2])]	5 (2-7)	5 (4-11)	0.39
Partial Mayo Score[4] [Median (IQR[2])]	5 (3.3-6.8)	5 (3-8)	0.70
Endoscopic Mayo Score[4] [n (%)]			0.337
2	1 (20.0)	6 (42.9)	
3	4 (80.0)	8 (57.1)	
Infliximab trough levels week 14 [median in mg/dL (IQR[2])]	11.4 (9.1-18.9)	3.7 (0.5-13.0)	0.025*
C-Reactive Protein [median in mg/dL (IQR[2])]	0.52 (0.3-2.2)	1 (0.3-2.0)	0.37
Albumin [Mean in mg/dL (SD)]	4.13 (0.44)	4.11 (0.52)	0.921
Fecal Calprotectin [Median in µg/mg (IQR[2])]	766 (311-1250)	1155 (243-3649)	0.68

(1) Steroid-free deep remission
(2) Interquartile range
(3) Applies to patients with Crohn's disease
(4) Applies to patients with ulcerative colitis
(5) IA-VAT: Intra-abdominal Visceral Adipose Tissue
(*) Statistically significant

Supplementary Table 6: Differences in characteristics among patients that started vedolizumab and did and did not achieve steroid free remission at week 14

	Achieved SFDR[1] at week 14 (n = 18)	Did not achieve SFDR[1] at week 14 (n = 28)	p-value
Female gender [n (%)]	8 (44.4)	14 (50.0)	0.713
Age [mean in years [SD])	37.17 (13.5)	47.29 (18.8)	0.055
Hispanic ethnicity [n (%)]	1 (5.6)	1 (3.6)	0.74
Race [n (%)]			0.24
Caucasian	17 (94.4)	26 (92.9)	
African-American	None	2 (7.1)	
Asian	1 (5.6)	None	
Other	None	None	
Active smoker at baseline [n (%)]	None	2 (7.14)	0.513
Years with inflammatory bowel disease [Median (IQR[2])]	5 (1-15)	5 (1-10)	0.56
Disease Type			0.540
Crohn's	6 (33.3)	7 (25.0)	
Ulcerative colitis	12 (66.7)	21 (75.0)	
History of bowel resection [n (%)]	1 (5.6)	2 (7.1)	0.83
Phenotype of Crohn's disease[3]			
Location [n (%)]			1.00
L1: Ileal	1 (16.7)	2 (28.6)	
L2: Colonic	2 (33.3)	2 (28.6)	
L3: Ileocolonic	3 (50.0)	3 (42.9)	
L4: Upper Gastrointestinal tract involvement [n (%)]	None	None	NA
B1: Not stricturing, non-penetrating [n (%)]	4 (66.7)	4 (57.1)	1.00
B2: Stricturing [n (%)]	1 (16.7)	3 (42.9)	0.559
B3: Penetrating [n (%)]	None	1 (14.3)	1.00
Phenotype of Ulcerative Colitis[4]			
Ulcerative Colitis Extension [n (%)]			0.171
Proctitis	1 (8.3)	1 (4.8)	
Left-sided Colitis	6 (50.0)	2 (9.5)	
Pan-colitis	5 (41.7)	18 (85.7)	
Body Composition Parameters at Baseline			
Total Mass [Mean in Kg (SD)]	80.22 (17.5)	85.80 (17.6)	0.299
Body Mass Index [Mean in Kg/m^2 (SD)]	26.16 (4.2)	29.79 (5.7)	0.025*
Percentage of Body Fat [Mean in % (SD)]	31.21 (9.3)	38.20 (9.9)	0.021*
Total IA-VAT[5] Mass [Mean in Kg (SD)]	0.77 (0.63)	1.56 (0.96)	0.004*
Total Fat Mass [Mean in % (SD)]	25.45 (10.7)	33.40 (12.7)	0.033*
IA-VAT[5] percentage of total body mass [Mean in % (SD)]	0.87 (0.6)	1.70 (0.9)	0.001*
IA-VAT[5] percentage of total fat mass [Mean in % (SD)]	2.83 (2.1)	4.34 (2.0)	0.020*
Total Lean Mass [Mean in Kg (SD)]	51.4 (11.9)	49.0 (10.7)	0.476
Medications at Baseline and Previous Exposure			
Previous Use of Biologic [n (%)]	3 (16.7)	15 (53.4)	0.015*
Receiving steroids at baseline [n (%)]	10 (55.6)	17 (60.7)	0.729
Use 5-aminosalicilates [n (%)]	4 (22.2)	3 (10.7)	0.407
Receiving combination therapy with immunomodulator [n (%)]	4 (22.2)	7 (25.0)	1.00
Receiving a thiopurine for combination therapy [n (%)]	4 (22.22)	4 (14.29)	0.69

Receiving a methotrexate for combination therapy [n (%)]	None	3 (10.71)	0.270
Vedolizumab drug level at week 14 [Median in mg/dL (IQR)	14.3 (11.3-23.6)	9.0 (5.6-14.0)	0.01*
Detectable anti-vedolizumab antibodies [n (%)]	None	1 (3.9)	0.30
Baseline Disease Activity			
Simple Endoscopic Score-CD[1] [Median (IQR)]	6 (4-13)	10 (7-16)	0.25
Harvey Bradshaw Index[1] [Median (IQR)]	5 (2-10)	6 (4-8)	0.772
Partial Mayo Score[2] [Median (IQR)]	5 (2-6)	5 (4-7)	0.43
Endoscopic Mayo Score[2] [n (%)]			0.83
2	9 (75.0)	15 (71.4)	
3	3 (25.0)	6 (28.6)	
Vedolizumab trough drug levels week 14 [median in mg/dL (IQR[2])]	14.3 (11.3-23.6)	9.0 (5.6-14.0)	0.01*
Detectable anti-vedolizumab antibodies [n (%)]			
C-Reactive Protein [median in mg/dL (IQR)]	0.1 (0.1-0.3)	0.7 (0.3-1.3)	<0.001*
Albumin [Mean in mg/dL (SD)]	4.34 (0.39)	4.14 (0.47)	0.124
Fecal Calprotectin[4] [Median in µg/mg(IQR)]	495 (231-907)	662 (329-195)	0.44

(1) Steroid-free deep remission
(2) Interquartile range
(3) Applies to patients with Crohn's disease
(4) Applies to patients with ulcerative colitis
(5) IA-VAT: Intra-abdominal Visceral Adipose Tissue
(*) Statistically significant

Supplementary Table 7: Differences in characteristics among patients that started ustekinumab and did and did not achieve steroid free remission at week 16

	Achieved SFDR at week 16 (n = 13)	Did not achieve SFDR at week 16 (n = 30)	p-value
Female gender [n (%)]	10 (76.9)	14 (46.7)	0.098
Age [mean in years [SD])	34.2 (12.7)	40.57 (17.4)	0.244
Hispanic ethnicity [n (%)]	1 (7.7)	None	0.26
Race [n (%)]			0.29
Caucasian	13 (100.0)	25 (83.3)	
African-American	None	4 (13.3)	
Asian	None	1 (3.3)	
Other	None	None	
Years with inflammatory bowel disease [Median (IQR)]	8 (1.3-15.3)	11 (6-16)	0.26
Disease Type [n (%)]			0.99
Crohn's disease	10 (76.9)	23 (76.7)	
Ulcerative colitis	3 (23.1)	7 (23.3)	
Active smoker at baseline [n (%)]	None	5 (16.7)	0.301
Years with inflammatory bowel disease [Median in years (IQR)]	8 (1.3-15.3)	11 (6-16)	0.26
Phenotype of Crohn's disease[1]			
Location [n (%)]			0.07
L1: Ileal	1 (10.0)	8 (34.78)	
L2: Colonic	3 (30.0)	1 (4.35)	
L3: Ileocolonic	6 (60.0)	14 (60.87)	
L4: Upper Gastrointestinal tract involvement [n (%)]	1 (10.0)	2 (8.7)	1.0
B1: Not stricturing, non-penetrating [n (%)]	3 (30.0)	4 (17.4)	0.646
B2: Stricturing [n (%)]	6 (60.0)	13 (56.52)	1.00
B3: Penetrating [n (%)]	1 (10.0)	8 (34.78)	0.22
Phenotype of Ulcerative Colitis[2]			
Ulcerative Colitis Extension [n (%)]			0.30
Proctitis	None	None	
Left-sided Colitis	1 (33.3)	None	
Pan-colitis	2 (66.7)	7 (100)	
Body Composition Parameters at Baseline			
Total Mass [Mean in Kg (SD)]	66.55 (10.76)	86.53 (23.38)	0.005*
Body Mass Index [Mean in Kg/m^2 (SD)]	33.79 (8.17)	35.27 (10.89)	0.665
Percentage of Body Fat [Mean in % (SD)]	24.50 (3.31	29.79 (8.55)	0.037*
Total IA-VAT[3] Mass [Mean in Kg (SD)]	0.50 (0.30)	1.52 (1.397)	0.013*
Total Fat Mass [Mean in % (SD)]	22.73 (7.28)	31.88 (17.22)	0.074
IA-VAT[3] percentage of total body mass [Mean in % (SD)]	0.73 (0.40)	1.59 (1.30)	0.023*
IA-VAT[3] percentage of total fat mass [Mean in % (SD)]	2.16 (1.09)	4.51 (3.44)	0.021*
Total Lean Mass [Mean in Kg (SD)]	41.08 (7.55)	50.77 (10.72)	0.005*
Medications at Baseline and Previous Exposure			
Previous Use of Biologic [n (%)]	11 (84.62)	29 (96.67)	0.213

Receiving steroids at baseline [n (%)]	7 (53.9)	25 (83.3)	0.042*
Use 5-aminosalicilates [n (%)]	1 (7.7)	0 (0)	0.302
Receiving combination therapy with immunomodulator [n (%)]	7 (53.9)	13 (43.3)	0.526
Receiving a thiopurine for combination therapy [n (%)]	5 (38.5)	9 (30.0)	0.587
Receiving a methotrexate for combination therapy [n (%)]	3 (23.1)	4 (13.3)	0.270
Ustekinumab trough level at week 16 [Median in mg/dL (IQR)	7.8 (6.5-10.3)	3.6 (2.3-5.2)	0.003*
Detectable anti-ustekinumab antibodies [n (%)]	None	None	N/A
Baseline Disease Activity			
Simple Endoscopic Score-CD[1] [Median (IQR)]	9 (8-12)	8 (7-20)	0.65
Harvey Bradshaw Index[1] [Median (IQR)]	5 (1-5)	5 (2-8)	0.25
Partial Mayo Score[2] [Median (IQR)]	6 (5-8)	4 (2-5)	0.035*
Endoscopic Mayo Score[2] [n (%)]			0.04*
2	None	5 (71.4)	
3	3 (100)	3 (28.6)	
C-Reactive Protein [median in mg/dL (IQR)]	0.3 (0.1-0.61)	0.65 (0.3-1.3)	0.027*
Albumin [Mean in mg/dL (SD)]	4.39 (0.28)	4.08 (0.51)	0.051
Fecal Calprotectin[4] [Median in µg/mg(IQR)]	427 (54-988)	648 (214-2441)	0.19

(1) Patients with Crohn's disease
(2) Patients with ulcerative colitis
(3) IA-VAT: Intra-abdominal Visceral Adipose Tissue
(4) 7 patients in the cohort had baseline fecal calprotectin performed at week 16
(*) Statistically significant

Supplementary Table 8: Differences in interleukin levels between patients with active inflammatory bowel disease and a healthy control group.

Cytokine	Healthy Control Group (n=50)	Inflammatory Bowel Disease Patients (n=45)	P value
Interferon Gamma [Median in pg/ml (IQR)]	0.087 (0.06-0.11)	0.1 (0.053-0.19)	0.17
Interleukin-1a [Median in pg/ml (IQR)]	0.26 (0.09-1.34)	0.2 (0.09-0.61)	0.41
Interleukin-1b [Median in pg/ml (IQR)]	0.05 (0.03-0.07)	0.06 (0.04-0.08)	0.46
Interleukin-4 [Median in pg/ml (IQR)]	0.15 (0.1-0.3)	0.15 (0.11-0.26)	0.97
Interleukin-5 [Median in pg/ml (IQR)]	0.23 (0.12-0.41)	0.163 (0.08-0.34)	0.15
Interleukin-6 [Median in pg/ml (IQR)]	1.15 (0.69-1.9)	1.82 (0.84-3.5)	0.033*
Interleukin-7 [Median in pg/ml (IQR)]	3.89 (2.63-6.31)	3.8 (1.75-6.88)	0.57
Interleukin-8 [Median in pg/ml (IQR)]	5.55 (4.3-9.9)	6.79 (4.6-11.36)	0.113
Interleukin-10 [Median in pg/ml (IQR)]	0.85 (0.62-1.1)	0.94 (0.78-1.63)	0.017*
Interleukin-12 p70 [Median in pg/ml (IQR)]	0.22 (0.12-0.4)	0.22 (0.14-0.43)	0.76
Interleukin-13 [Median in pg/ml (IQR)]	16.1 (2.2-52.77)	17.23 (1.85-40.14)	0.23
Interleukin-15 [Median in pg/ml (IQR)]	10.3 (9.3-13.17)	12.1 (9.15-15.13)	0.024*
Interleukin-22 [Median in pg/ml (IQR)]	0.84 (0.44-1.24)	1.3 (0.71-2.8)	0.006*
Interleukin-23 [Median in pg/ml (IQR)]	148.7 (17.3-729.3)	137.0 (19.16-522.14)	0.84
Tumor Necrosis Factor alpha [Median in pg/ml (IQR)]	3.13 (2.3-3.93)	3.4 (2.28-7.63)	0.036*
VEGF [Median in pg/ml (IQR)]	65.5 (47.6-95.5)	74.3 (52.5-109.18)	0.42

(*) Statistically significant

Supplementary Table 9: Correlation between intra-abdominal visceral adipose tissue mass percentage (of total mass) and serum inflammatory cytokines in patients with active inflammatory bowel diseases

Cytokine	Spearman Correlation with IA-VAT%[1]	P value
Interferon gamma	0.02	0.89
Interleukin-1 alpha	-0.1	0.5
Interleukin-1 beta	0.12	0.41
Interleukin-4	-0.91	0.57
Interleukin-5	0.12	0.46
Interleukin-6 beta	0.37	0.012*
Interleukin-7	-0.2	0.18
Interleukin-8	-0.07	0.65
Interleukin-10	0.12	0.44
Interleukin-12 p70	0.06	0.71
Interleukin-13	-0.37	0.01*
Interleukin-15	0.03	0.87
Interleukin-22	0.09	0.55
Interleukin-23	-0.25	0.1
Tumor Necrosis Factor alpha	0.53	<0.001*
Vascular endothelial growth factor	0.23	0.14

(1) IA-VAT: Intra-abdominal Visceral Adipose Tissue

(*) Statistically significant

Supplementary Table 10: Differences in serum interleukin levels stratified by intra-abdominal visceral adipose tissue percentage of total body mass and steroid free remission status at week 14 (infliximab and vedolizumab) or week 16 (ustekinumab).

Cytokine	No SFDR[1] at week 14/16 with high IA-VAT[2,3]	SFDR[1] at week 14/16 with high IA-VAT[1,2]	No SFDR at week 14/16 with low IA-VAT[1,2]	SFDR at week 14/16 with low IA-VAT[1,2]	P Value
Interferon Gamma [Median in pg/ml (IQR)]	0.09 (0.05- 0.14)	0.11 (0.04-0.21)	0.12 (0.07-0.265)	0.10 (0.05-0.18)	0.99
Interleukin-1a [Median in pg/ml (IQR)]	0.25 (0.08-0.44)	0.14 (0.09-0.90)	0.46 (0.22-1.60)	0.17 (0.06-0.51)	0.39
Interleukin-1b [Median in pg/ml (IQR)]	0.06 (0.05-0.07)	0.06 (0.03-0.11)	0.07 (0.06-0.10)	0.04 (0.03-0.06)	0.05
Interleukin-4 [Median in pg/ml (IQR)]	0.14 (0.09-0.23)	0.15 (0.13-0.24)	0.16 (0.13-0.29)	0.19 (0.05-0.39)	0.81
Interleukin-5 [Median in pg/ml (IQR)]	0.17 (0.10-0.33)	0.12 (0.06-0.33)	0.26 (0.13-0.52)	0.11 (0.06-0.18)	0.16
Interleukin-6 [Median in pg/ml (IQR)]	3.50 (1.43-8.50)	1.83 (1.21-2.63)	2.0 (1.22-3.33)	0.85 (0.48-1.35)	0.03*
Interleukin-8 [Median in pg/ml (IQR)]	5.469 (4.249-7.469)	8.50 (5.783-11.972)	6.979 (4.412-35.765)	7.972 (4.278-14.568)	0.59
Interleukin-7 [Median in pg/ml (IQR)]	1.89 (1.30-6.68)	4.0 (1.87-6.55)	6.30 (2.44-12.84)	4.00 (2.78-6.03)	0.26
Interleukin-10 [Median in pg/ml (IQR)]	0.95 (0.78-1.15)	1.30 (0.85-5.99)	1.48 (0.83-4.00)	0.83 (0.58-1.39)	0.18
Interleukin-12 p70 [Median in pg/ml (IQR)]	0.50 (0.17-0.63)	0.16 (0.08-0.24)	0.392 (0.13-0.46)	0.18 (0.15-0.27)	0.17
Interleukin-13 [Median in pg/ml (IQR)]	4.16 (1.31-34.12)	1.56 (0.31-36.03)	17.23 (5.53-64.73)	28.14 (19.16-44.67)	0.03*
Interleukin-15 [Median in pg/ml (IQR)]	12.18 (8.80-14.81)	11.90 (7.66-17.66)	11.18 (9.52-14.33)	12.03 (9.63-15.03)	0.98
Interleukin-22 [Median in pg/ml (IQR)]	1.326 (0.39-2.69)	1.33 (0.72-2.04)	3.05 (0.70-3.93)	1.03 (0.65-1.58)	0.64
Interleukin-23 [Median in pg/ml (IQR)]	93.31 (10.15-521.79)	16.65 (3.30-285.54)	81.41 (43.95-630.94)	304.80 (135.61-453.75)	0.08
Tumor Necrosis Factor alpha [Median in pg/ml (IQR)]	7.22 (3.77-20.82)	3.86 (2.67-14.27)	3.34 (2.29-8.67)	2.12 (1.65-3.07)	<0.01*
VEGF [Median in pg/ml (IQR)]	80.6 (59.18-150.09)	78.51 (43.63-113.60)	61.30 (30.21-95.52)	91.11 (51.41-126.34)	0.57

(1) Steroid free deep remission at week 14 (infliximab or vedolizumab) or week 16 (ustekinumab)
(2) High intra-abdominal visceral adipose tissue (IA-VAT) defined as visceral adipose tissue % of body mass ≥1.04%
(*) Statistically significant