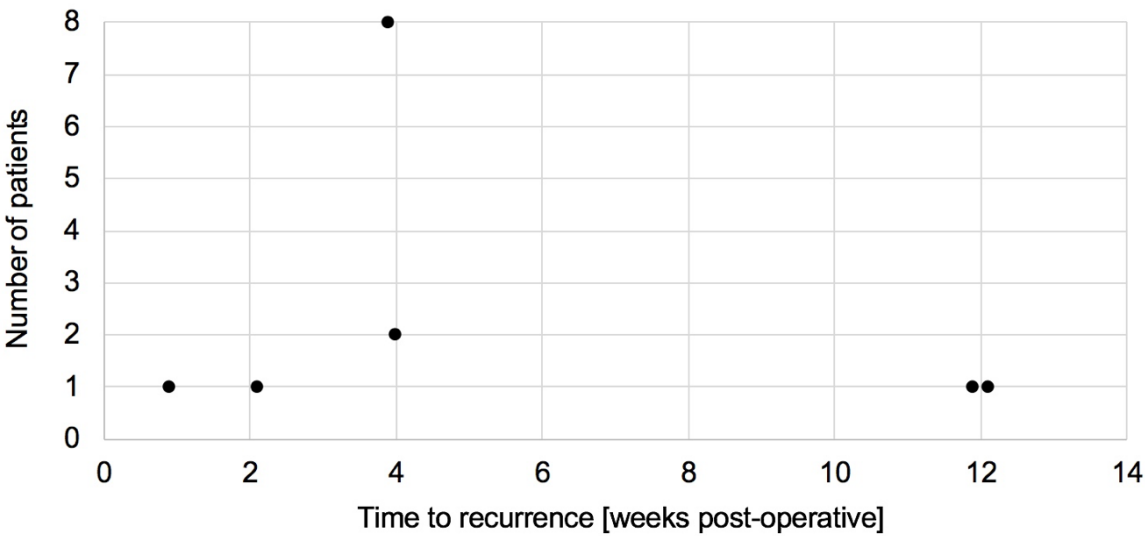


1 **Supplementary Figures**

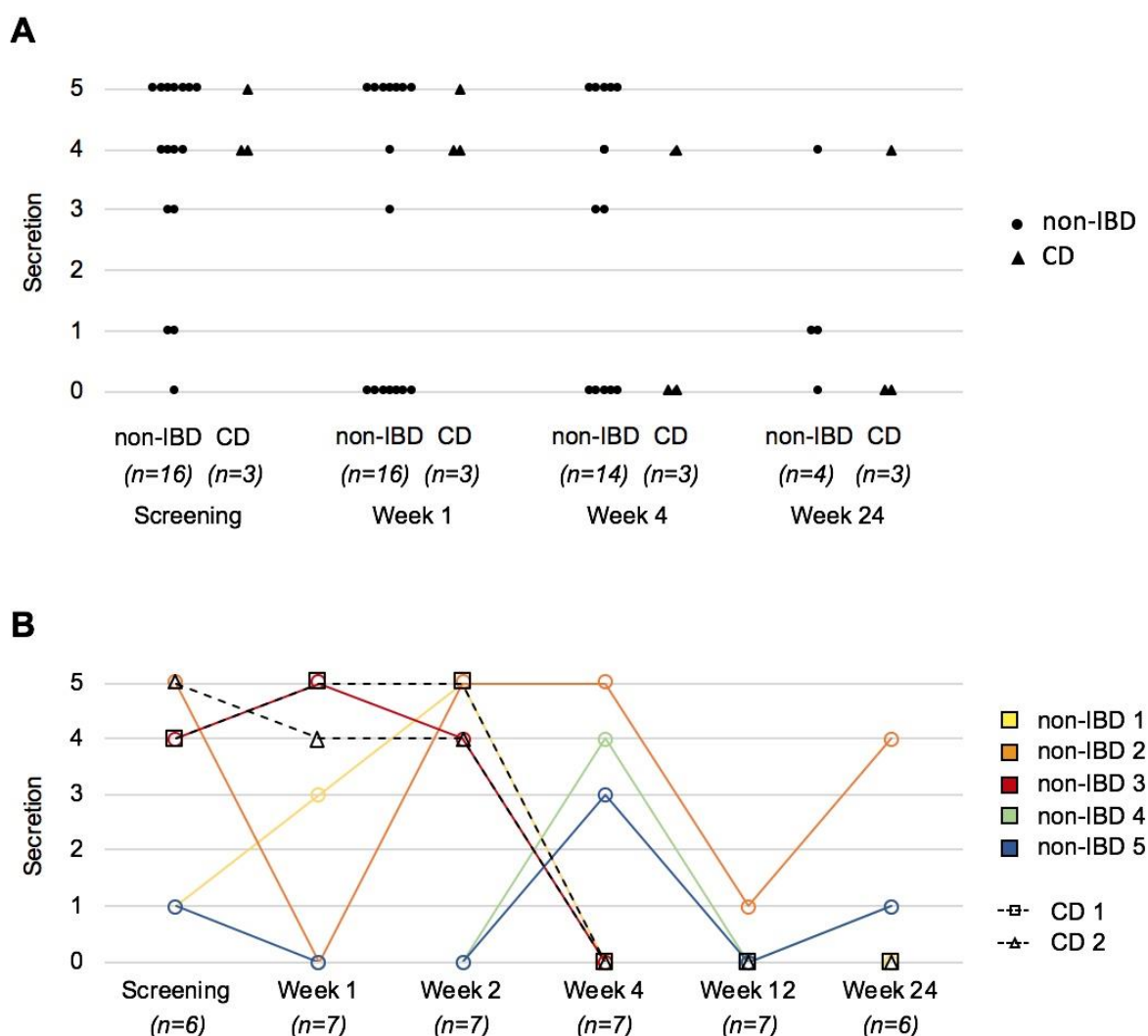
2

3 **Supplementary Figure S1: Time to recurrence in patients after fistulodesis.**



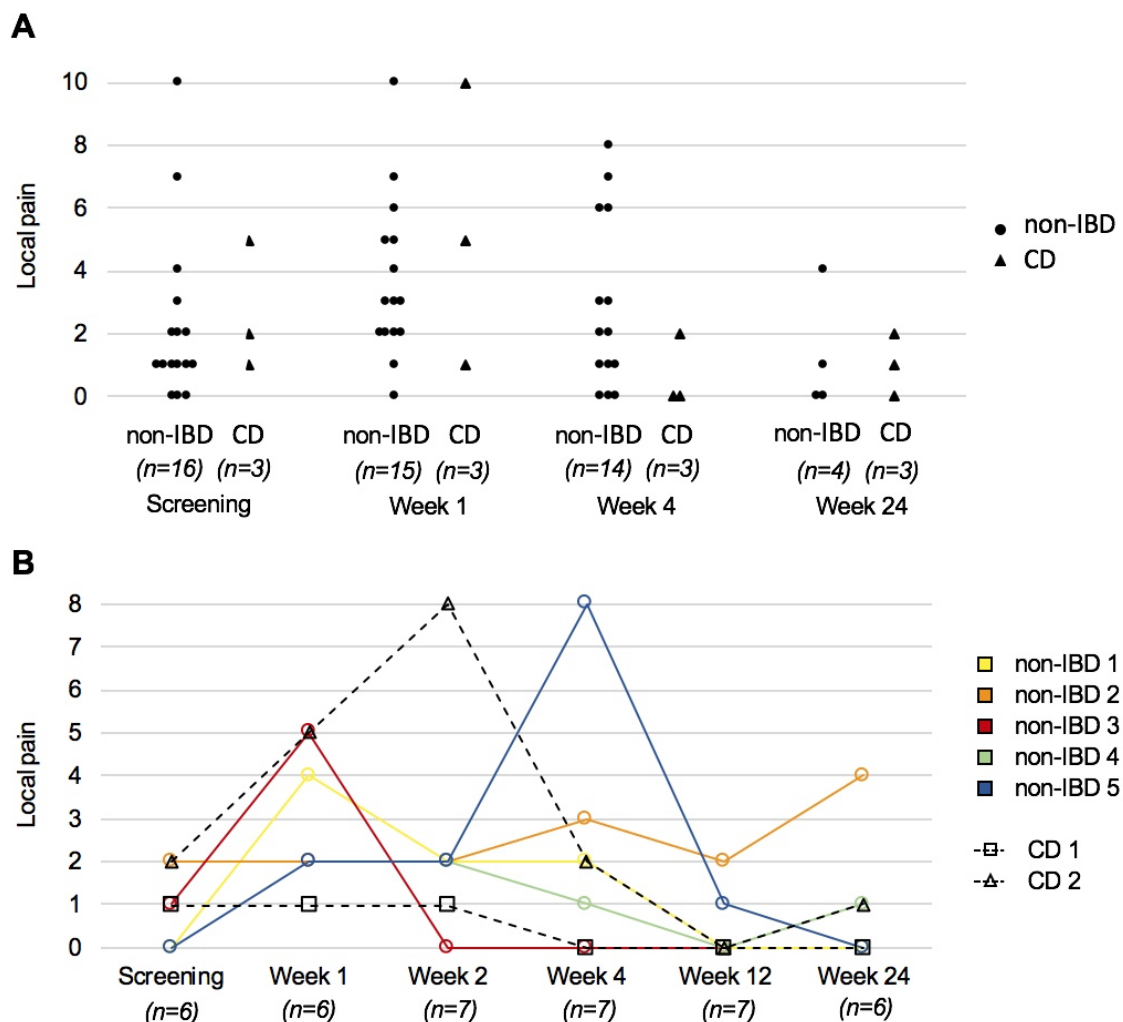
4

Supplementary Figure S2: Effects of fistulodesis on perianal secretion. (A) Perianal secretion over time in all patients, (B) perianal secretion over time in seven patients with healing of at least one fistula upon fistulodesis.



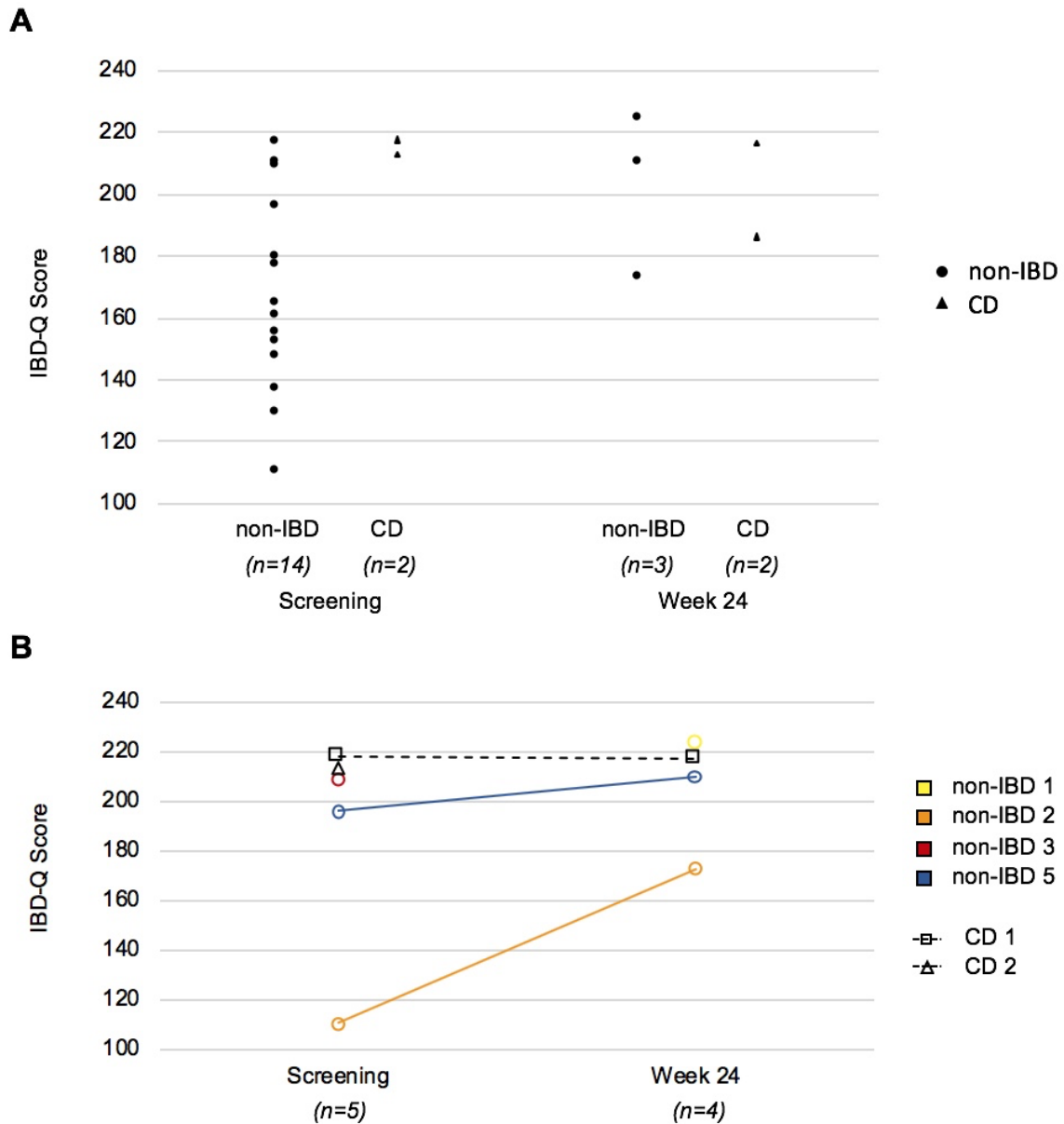
No significant differences were recorded (comparing week 0 and 24, Wilcoxon test). Secretion: 0: no secretion, 1: less than once weekly, 2: weekly, 3: repeatedly in one week, 4: daily, 5: several times per day; non-IBD: Non-inflammatory bowel disease; CD: Crohn's disease.

Supplementary Figure S3: Effects of fistulodesis on local pain. (A) Local pain at fistula site over time in all patients, **(B)** local pain at fistula site in seven patients with healing of at least one fistula upon fistulodesis.



No significant differences were recorded (comparing week 0 and 24, Wilcoxon test). The maximum of local pain in the past two weeks was assessed using the visual analog scale (VAS 0,1-10, 0: none). Non-IBD: Non-inflammatory bowel disease; CD: Crohn's disease.

Supplementary Figures S4: Effects of fistulodesis on quality of life. (A) IBD-Q score at screening and week 24 in all patients, **(B)** IBD-Q score in seven patients with healing of at least one fistula upon fistulodesis.



No significant differences were recorded (comparing week 0 and 24, Wilcoxon test). IBD-Q: Inflammatory bowel disease-questionnaire; non-IBD: Non-inflammatory bowel disease; CD: Crohn's disease.

Supplementary Table S1: Different characteristics in patients with and without treatment success.

Characteristics	Successful treatment of at least 1 fistula n=7	No Success n=13	P-value
Female: n (%)	1 (14 %)	9 (69 %)	0.6667
Male: n (%)	6 (86 %)	4 (31 %)	(n.s.)
BMI [kg/m ²] median (IQR), range	25 (22 – 28) Range: 20 – 34	27 (20 – 30.5) Range: 20 – 38	0.9217 (n.s.)
Age (years) median (IQR), range	34 (32 – 49) Range: 25 – 67	46 (40 – 52.5) Range: 32 – 76	0.1091 (n.s.)
Smokers: n (%)	2 (29%) ¹⁾	3 (23%) ¹⁾	0.6667
Pack years	0.25 (0 – 16.5)	0 (0 – 10)	(n.s.)
median (IQR), range	Range: 0 – 18	Range: 0 – 30	0.4753 (n.s.)
Years from fistula onset until fistulodesis median (IQR), range	1.6 (0.7 – 5.2) Range: 0.7 – 6.9	1 (0.2 – 2.4) Range: 0.2 – 12.3	0.4240 (n.s.)
Previous fistula operations median (IQR), range	2.5 (0.75 – 5.75) Range: 0 – 8 ²⁾	1 (1 – 3) Range: 0 – 10	0.5650 (n.s.)
IBD-Q score at screening median (IQR), range	209 (153.5 – 215.5) ³⁾ Range: 111 – 218	162.5 (148.3 – 201.8) ⁴⁾ Range: 129 – 217	0.2436 (n.s.)
PDAI at screening median (IQR), range	4 (4 – 5) Range: 3 – 6 ¹⁾	6.5 (6 – 8.75) Range: 4 – 14	0.0013
Pre-operative local pain median (IQR), range	1 (0 – 2) Range: 0 – 2 ¹⁾	2 (1 – 4.25) Range: 0 – 10	0.0789 (n.s.)
Pre-operative secretions median (IQR), range	4 (1 – 5) Range: 1 – 5 ¹⁾	4.5 (3.75 – 5) Range: 0 – 5	0.2580 (n.s.)
Distance outer lumen to dentate line [cm] median (IQR), range	1.85 (1.125 – 2.375) Range: 1 – 4 ¹⁾	2 (1 – 3.125) Range: 1 – 4	0.7528 (n.s.)
Distance inner lumen to dentate line [cm] median (IQR), range	0.25 (0 – 1.25) Range: 0 – 2 ¹⁾	0 (0 – 0.5) Range: 0 – 0.6	0.2143 (n.s.)
Length of fistula tract [cm] median (IQR), range	3.3 (2.5 – 4.875) Range: 2 – 5 ¹⁾	3.8 (2 – 4.85) Range: 1.5 – 6	0.9331 (n.s.)
Sphincter involvement [%] mean (IQR), range	50% (32.5 – 77.5) Range: 30 – 80 ¹⁾	50% (48.5 – 58) Range: 25 – 75	0.9477 (n.s.)

In a conservative analysis, patients with at least one successfully treated fistula were considered as having treatment success. If only the 6 patients with successful treatment of all fistula were considered, similar results were obtained (p-value for PDAI: 0.017).

Statistical analysis: Mann-Whitney test, Fisher exact test. BMI: Body-Mass-Index; IQR: Interquartile range; IBD-Q: Inflammatory bowel disease questionnaire; PDAI: Perianal disease activity index; n.s.: not significant.

- 1 ¹⁾ Missing values for 1 patient, ²⁾ missing values for 2 patients, ³⁾ missing values for 3 patients,
- 2 ³⁾ missing values for 4 patients

