**Supplementary Online Material**

**An open-labeled study on fecal microbiota transfer (FMT) in irritable bowel syndrome (IBS) patients reveals improvement in abdominal pain associated with the relative abundance of *Akkermansia* *muciniphila***

Rebeca M. Cruz-Aguilar, MD1, Nina Wantia, MD2, Thomas Clavel, PhD3,6, Maria J.G.T. Vehreschild, MD4, Thorsten Buch, PhD5, Monther Bajbouj, MD1, Dirk Haller, PhD3,7, Dirk Busch, MD2, Roland M. Schmid, MD1, Christoph K. Stein-Thoeringer, MD1

1Klinik und Poliklinik für Innere Medizin II, Klinikum rechts der Isar, Technical University of Munich, Germany;

2Institute of Medical Microbiology, Immunology and Hygiene, Technical University of Munich, Germany;

3ZIEL – Institute for Food & Health, Technical University of Munich, Germany;

4Klinik I für Innere Medizin, University Clinic Cologne, Germany;

5Institute of Laboratory Animal Science, University of Zurich, Switzerland.

6Functional Microbiome Research Group, Institute of Medical Microbiology, University Hospital of RWTH, Aachen, Germany

7Chair of Nutrition and Immunology, Technical University of Munich, Germany

**Table 1.**

Donor characteristics.

|  |  |
| --- | --- |
| **Feature** | **Characteristics** |
| Age (y):  | 28 |
| Gender:  | male |
| Weight (kg): | 72 |
| Height (m):  | 1.86 |
| BMI: | 20.8 |
| Bowel habits and gastrointestinal features: | ~ 1 bowel movement/day |
|  | No use of PPIs or laxatives |
|  | No history of constipation, diarrhea, or abdominal pain |
|  | No history of gastrointestinal infections |
| Personal history: | No evidence for autoimmune diseases, metabolic disorders, neurological or psychiatric disorder, chronic fatigue syndrome, cancer, infectious diseases, antibiotic intake in the past year prior to donation, inflammatory bowel disorder, surgery, fever in the last month prior to screening and donation; no regular or recurrent intake of any medication  |
| Family history: | No family history for cancer, GI disorders, hereditary diseases |

**Table 2**

Characteristics of study patients

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Patient #** | **01** | **02** | **03** | **04** | **05** | **06** |  |
| Symptom duration (y) | 11 | 4 | 3 | 3 | 8 | 1 |  |
| Comorbidities | Hypertension, allergies, fructose malabsorpt., GERD | Mb. Meulengr. | none | none | Hashimoto's disease | chronic sinusitis,allergies, lactose malabsorpt. |  |
| Current medication | pantoprazol | none | 5-ASA, loperamide, amitriptyline | none | loperamide, mebeverine | lactase, opipramol |  |
|  |  |  |  |  |  |  |  |
| Patient # | 07 | 08 | 09 | 10 | 11 | 12 | 13 |
| Symptom duration (y) | 8 | 5 | 2 | 5 | 30 | 4 | 20 |
| Comorbidities | lactose and sorbitol malabsorpt. | chronic fatigue syndrome | none | lactose and fructose malabsorpt. | GERD, prostate hyperplas., recurrent tinnitus, AV block II | asthma | chronic sinusitis, lactose and fructose and sorbitol malabsorpt., chronic kidney failure II, fibromyalgia, allergies |
| Current medication | lactase,prucalopride | lorazepam, bisacodyl, magnesium, docusate sodium | valerian | none | pangrol (pancreatic enzyme replacem. therapy), simeticon | probiotics | mirtazapine, montelukast, rupatadine, fexofenadine |