

Supplementary tables and figures

Table S1. Clinical parameters and characteristics of N=4 participants receiving autologous FMT

	Patient 1	Patient 2	Patient 3	Patient 4
Age (years) at time of HSCT	47	53	65	34
Sex	Male	Female	Male	Female
Diagnosis	IgG K Multiple Myeloma	Kappa light chain Multiple Myeloma	IgG K Multiple Myeloma	IgA K Multiple Myeloma
Conditioning	HDM 140mg/m ²	HDM 200mg/m ²	HDM 200mg/m ²	HDM 200mg/m ²
Prophylactic and empirical antibiotics, antivirals, antifungals	Norfloxacin 400mg BD, Famciclovir 250mg BD, Fluconazole 200mg OD Cefepime (D+9)	Trimethoprim/Sulfamethoxazole 160/800mg Famciclovir 500mg BD Tazocin (D+7)	Trimethoprim/Sulfamethoxazole 160/800mg BD Famciclovir 500mg BD Entecavir 0.5mg Norfloxacin, Fluconazole Azithromycin (D+8)	Trimethoprim/Sulfamethoxazole 160/800mg BD Famciclovir 500mg BD Norfloxacin 400mg BD Fluconazole 400mg (continued until D+10)
Body weight (kg) on day of FMT1.1	85	74	81	65
Number of enemas given and days relative to HSCT	3 (+2 to +4)	3 (+2 to +4)	2 (+3 to +4) <i>FMT1.3 not given due to low ANC</i>	1 (+1) <i>FMT1.2 and 1.3 not given due to participant preference</i>
Volume as mean ± SEM (mL)	33.3 ± 14.4	50.0 ± 0.0	51.5 ± 2.1	40.0 ± 0.0
Retention time as mean ± SEM (min)	97.3 ± 47.0	63.7 ± 16.2	14.0 ± 5.7	36.0 ± 0.0
Adverse events	N/A	N/A	Campylobacter gastroenteritis infection on D+8 (not traced to FMT), and engraftment syndrome (after day 10)	N/A

Table S2. Clinical assessments of N=4 participants receiving autologous FMT

	Patient 1				Patient 2				Patient 3				Patient 4			
	Day -4	Day 0	Day 5	Day 10	Day -4	Day 0	Day 5	Day 10	Day -4	Day 0	Day 5	Day 10	Day -4	Day 0	Day 5	Day 10
BW (kg)	85*	91. 5	86. 3	88	74	74. 8	72.2	73. 3	81*	83	79. 9	80. 5	65*	66. 3	63. 4	64.1
Stool consistency (BRS)	4	5	5	7	2.5	1	4	6.5	2.5	1	4	6.5	3	1	5	1
Stools/day	1	1	1	7	1	1	3	2	1	1	3	2	4	2	4	2
Rectal bleeding (Y/N)	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Abdominal pain (Y/N)	N	N	N	N	N	Y	N	N	N	N	N	Y	N	N	N	N

**indicates at-home (patient reported) measurement*

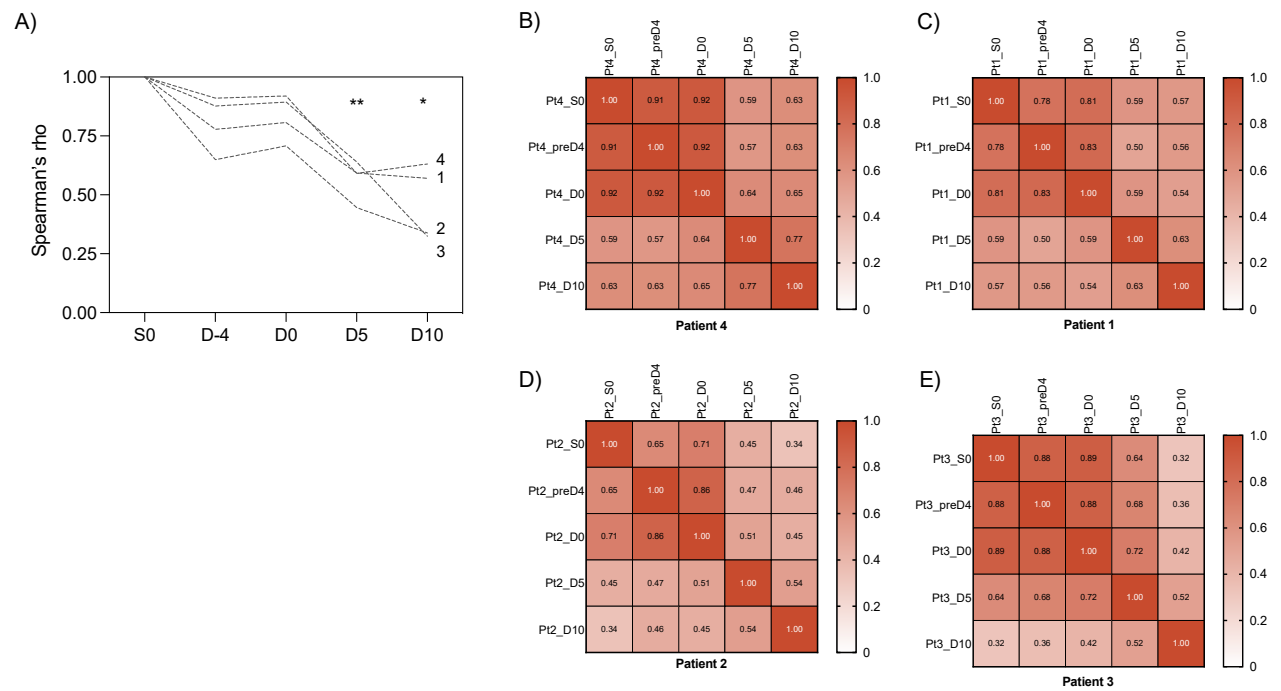


Figure S1. Spearman's correlation of longitudinal samples against the baseline sample of each patient as a graph (A) and as heatmaps for patients (B) 4 and (C) 1, (D) 2 and (E) 3. Data generated from relative abundance of OTUs at the genus level. ** indicates $P < 0.01$, * indicates $P < 0.05$ detected by one-way ANOVA against S0.