

## Supplementary Materials

**Table S1.** Summary information of cynomolgus monkeys

Sample ID	Gender	Age (years old)	Group
HC_1	Male	7	HC
HC_2	Male	7	HC
HC_3	Male	7	HC
HC_4	Male	7	HC
0_Diarrhea_1 (0_174317)	Male	5	Day_0
0_Diarrhea_2 (0_180552)	Male	4	Day_0
0_Diarrhea_3 (0_186850)	Male	4	Day_0
2_Diarrhea_1 (2_174317)	Male	5	Day_2
2_Diarrhea_2 (2_180552)	Male	4	Day_2
2_Diarrhea_3 (2_186850)	Male	4	Day_2
4_Diarrhea_1 (4_174317)	Male	5	Day_4
4_Diarrhea_2 (4_180552)	Male	4	Day_4
4_Diarrhea_3 (4_186850)	Male	4	Day_4
8_Diarrhea_1 (8_174317)	Male	5	Day_8
8_Diarrhea_2 (8_180552)	Male	4	Day_8
8_Diarrhea_3 (8_186850)	Male	4	Day_8

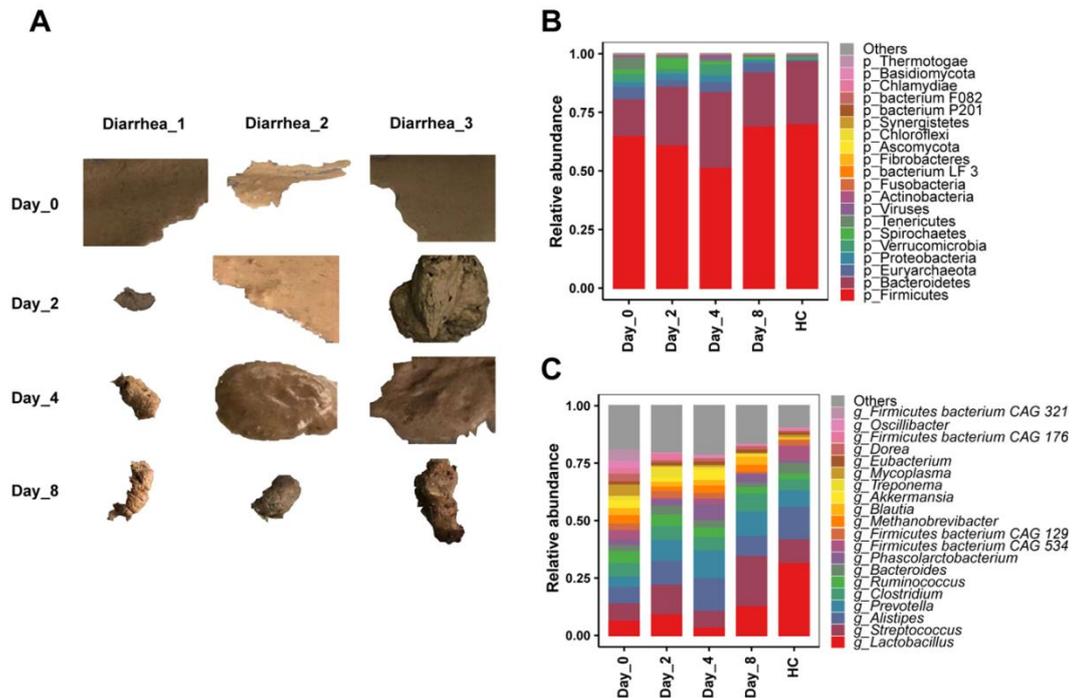
**Table S2.** Bristol stool scale

Typing	Form	Description
1	Nut-like stool	Hard, small pieces, like rabbit dung
2	Dry hard stool	Hard texture with multiple small pieces stuck together, sausage-like
3	Wrinkled stool	The surface is covered with cracks and is sausage-like
4	Banana-shaped stool	Soft texture, smooth surface, sausage-like
5	Soft stool	Soft semi-solid with uneven edges
6	Slightly shaped stool	Soft flakes, porridge with rough edges or no fixed shape
7	Watery stool	Watery, completely liquid without solids

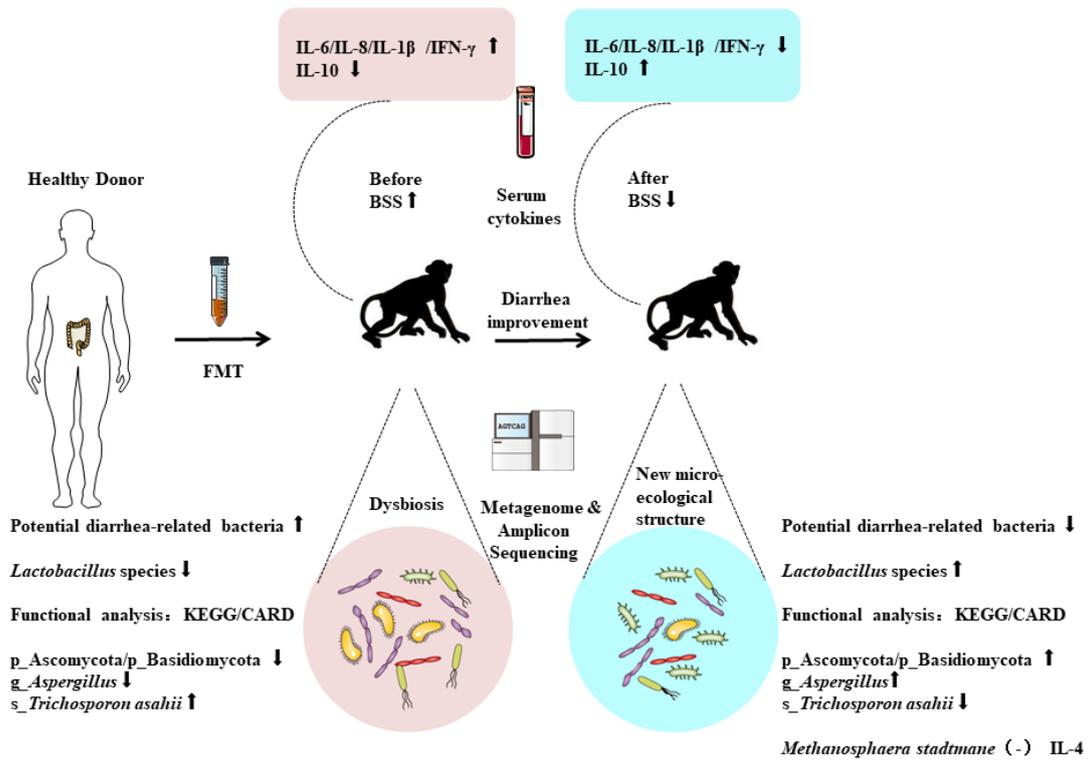
**Table S3.** PERMANOVA in microbial species composition

Phenotypes	<i>F</i>	<i>R</i> <sup>2</sup>	<i>P</i> value
Grouping	1.388523	0.335512	0.102897
BSS	2.137205	0.13244	0.043956
IL-6	2.028222	0.126541	0.040959
IL-8	0.901766	0.060514	0.484515
IL-1 $\beta$	1.268482	0.083078	0.236763
IFN- $\gamma$	1.053468	0.069982	0.390609
IL-4	0.629051	0.043	0.811189
IL-10	0.653095	0.04457	0.778222

*F* represents the *F*-statistic: larger *F* value indicates that the between-group variation is greater than within-group variation. *R*<sup>2</sup> represents the variation explained by the model. *q* represents the *q*-value calculated from permutation.



**Figure S1.** Effects of the FMT treatment on the incidence of diarrhea and gut microbiome. **(A)** Images of the fecal samples collected from Day\_0 (n = 3), Day\_2 (n = 3), Day\_4 (n = 3) and Day\_8 (n = 3). **(B)** The distribution of dominant bacterial phyla in all 5 groups. **(C)** The distribution of dominant bacterial genus in all 5 groups. HC, asymptomatic monkeys (n = 4); Day\_0, chronic diarrhea monkeys before FMT intervention (n = 3); Day\_2, Day\_4, Day\_8, chronic diarrhea monkeys after FMT intervention (n = 3 respectively).



**Figure S2.** Summary of the study findings.