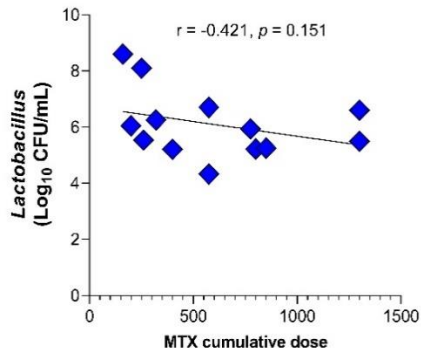
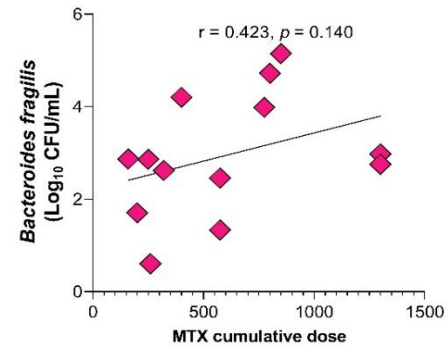


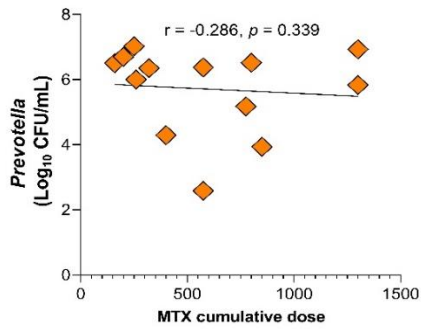
A)



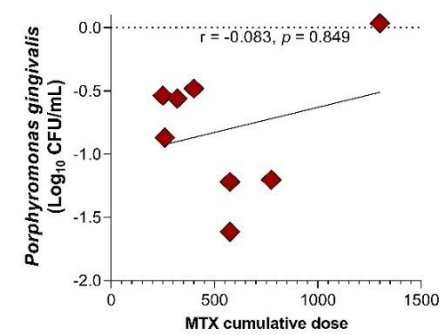
B)



C)



D)



E)

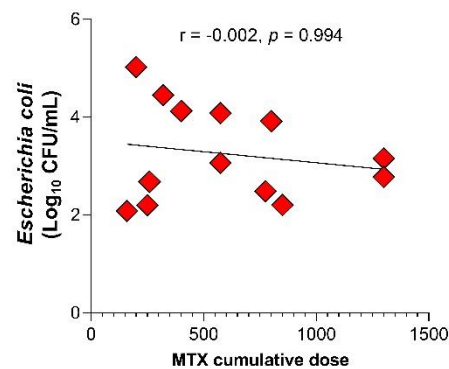
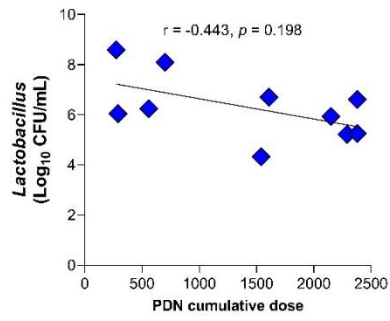
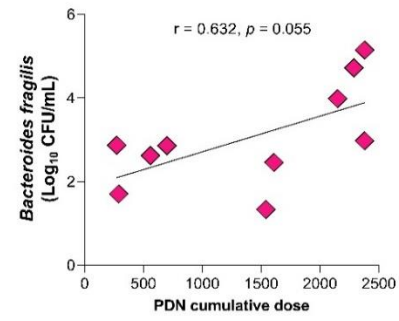


Figure S1. Correlation between MTX cumulative doses with the gut microbiota in RA patients with treatment. (A) *Lactobacillus*, (B) *Bacteroides fragilis*, (C) *Prevotella*, (D) *Porphyromonas gingivalis*, and (E) *Escherichia coli*. Spearman's correlation.  $r$ =rho, correlation coefficient.  $p$ -Value <0.05 was considered statistically significant.

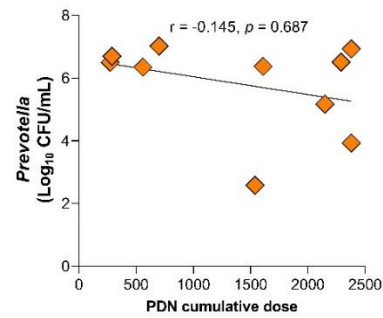
A)



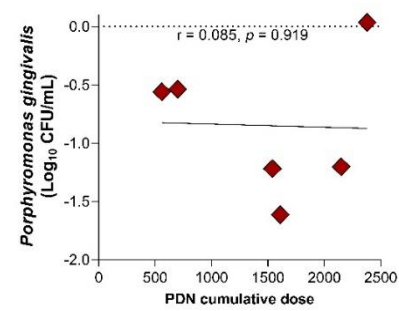
B)



C)



D)



E)

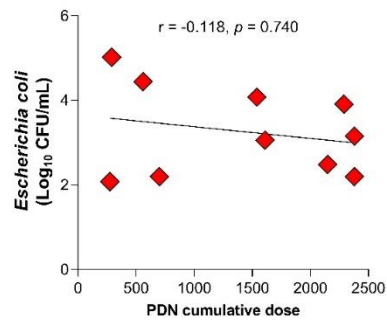


Figure S2. Correlation between PDN cumulative doses with the gut microbiota in RA patients with treatment. (A) *Lactobacillus*, (B) *Bacteroides fragilis*, (C) *Prevotella*, (D) *Porphyromonas gingivalis*, and (E) *Escherichia coli*. Spearman's correlation.  $r = \rho$ , correlation coefficient.  $p$ -Value  $< 0.05$  was considered statistically significant.

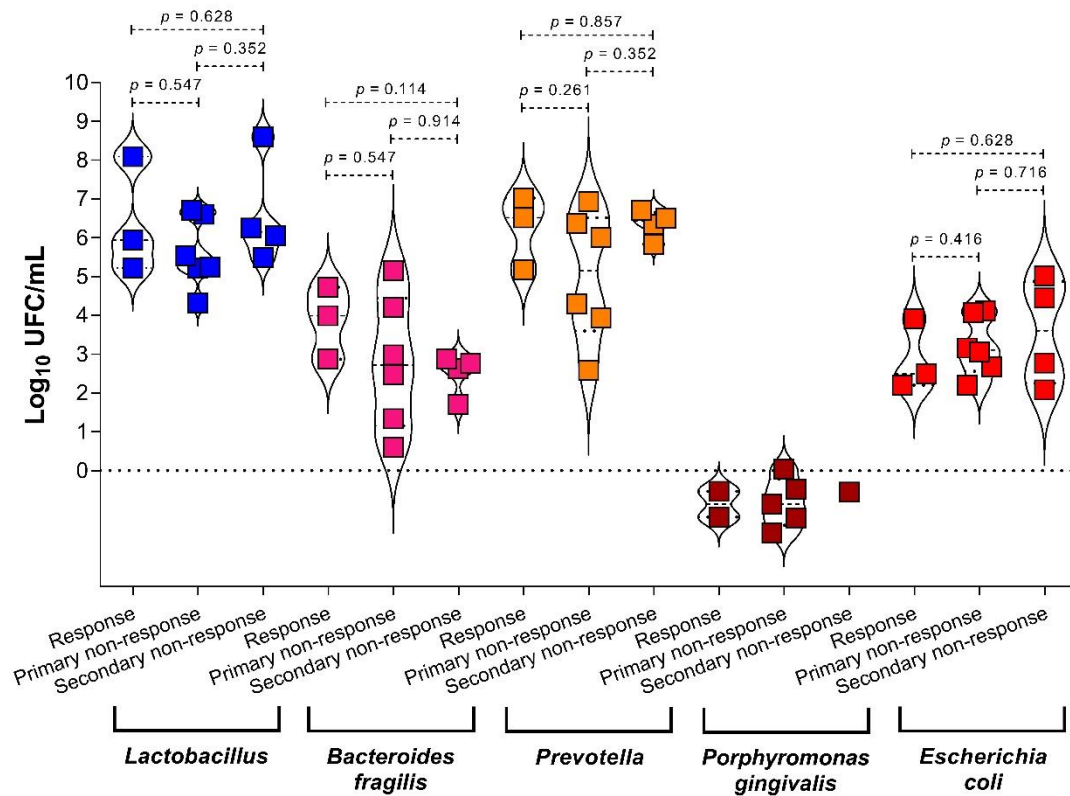


Figure S3. Association of gut microbiota according to response to phenotype to therapy in RA patients. Statistical analyses were performed by Mann Whitney U test.  $p$ -Value  $<0.05$  was considered statistically significant.

**Table S1.** Sequences of primers of bacterial specific for qPCR.

Bacterial group	Primer	Sequence	Product size (pb)	Cycles and amplification conditions	Reference
Firmicutes					
<i>Lactobacillus</i>	F	CGATGAGTGCTAGGTGTTGGA	186	40 cycles	[63]
	R	CAAGATGTCAAGACCTGGTAAG		5 min at 94°C, 20 s at 94°C, 20 s at 55°C, 50 s at 72°C, 30 s at 94°C	
Bacteroidetes					
<i>Bacteroides fragilis</i>	g-Bfra-F	ATAGCCTTTCGAAAGRAAGAT	495	40 cycles	[64,65]
	g-Bfra-R	CCAGTATCAACTGCAATTTTA		5 min at 94°C, 20 s at 94°C, 20 s at 50°C, 30 s at 72°C, 1 min at 72°C	
<i>Prevotella</i>	g-Prevo-F	CACRGTAACGATGGATGCC	513	40 cycles	[64,65]
	g-Prevo-R	GGTCGGGTTGCAGACC		5 min at 94°C, 20 s at 94°C, 20 s at 58.7°C, 50 s at 72°C, 1 min at 72°C	
<i>Porphyromonas gingivalis</i>	F	AGGCAGCTTGCCATACTGCG	404	40 cycles	[66]
	R	ACTGTTAGCAACTACCGATGT		2 min at 94°C, 20 s at 94°C, 20 s at 60°C, 20 s at 72°C, 1 min at 72°C	
Proteobacteria					
<i>Escherichia coli</i>	F	CATGCCGCGTGTATGAAGAA	95	40 cycles	[67]
	R	CGGGTAACGTCAATGAGCAAA		5 min at 94°C, 20 s at 94°C, 20 s at 60°C, 50 s at 72°C, 1 min at 72°C	

qPCR, quantitative polymerase chain reaction.