

ABSTRACT

METHOD AND COMPOSITION FOR TREATING OR DECREASING GUT MICROBIOME DYSBIOSIS INDUCED BY A PRIOR ANTIBIOTIC TREATMENT

The invention relates to using a class of microbial species that can contribute to robust recovery of the microbiome after antibiotic usage. In particular, the inventors of this invention have identified 21 bacterial species exhibiting robust association with ecological recovery post antibiotic therapy. As such, in an aspect of the invention, there is provided a use of composition comprising at least one of or any combination of microorganisms selected from the group consisting of: *Bacteroides thetaiotaomicron*, *Bifidobacterium adolescentis*, *Alistipes putredinis*, *Alistipes shahii*, *Bacteroides caccae*, *Bacteroides coprocola*, *Bacteroides eggerthii*, *Bacteroides intestinalis*, *Bacteroides stercoris*, *Bacteroides uniformis*, *Bifidobacterium bifidum*, *Bifidobacterium longum*, *Coprococcus catus*, *Desulfovibrio piger*, *Faecalibacterium prausnitzii*, *Parabacteroides distasonis*, *Parabacteroides johnsonii*, *Roseburia inulinivorans*, *Ruminococcus bromii*, *Ruminococcus torques*, and *Subdoligranulum variabile* for treating or decreasing gut microbiome dysbiosis induced by a prior antibiotic treatment.

Figure 3(a)