CLAIMS:

1. A method of determining a subtype of IBS in a subject with IBS-C or IBS-D, comprising determining an abundance of at least 5 species of bacteria in a sample from the subject, wherein the at least 5 species of bacteria include *Christensenella minuta, Soleaferrea massiliensis, Papillibacter cinnamivorans, Oscillibacter valericigenes, Ruminococcus bromii,* and determining a subtype of IBS as IBS-C or IBS-D by comparing the abundance of the at least 5 species of bacteria in the sample from the subject to the abundance of the at least 5 species of bacteria in a sample derived from a reference population, wherein the sample from the subject is derived from an orifice of the subject or is a faecal sample.

2. The method of claim 1 further comprising determining an abundance of at least one species of bacteria selected from *Gemmiger formicilis, Desulfitobacterium frappieri, Alistipes obesi, Anaerofilum pentosovorans, Akkermansia muciniphila, Alkaliphilus crotonatoxidans, Eubacterium sulci, Bdellovibrio exovorus, Curtobacterium pusillum, Flavonifractor plautii, Ruminococcus lactaris, Mogibacterium neglectum, Roseburia inulinivorans, Butyricimonas virosa, Intestinimonas butyriciproducens, Butyrivibrio crossotus, Barnesiella intestinihominis, Flavobacterium resistens, Flavobacterium cauense, Clostridium glycyrrhizinilyticum, Anaerostipes hadrus, Prevotella ruminicola, Blautia wexlerae, Anaerostipes coli, Bilophila wadsworthia, Lactobacillus japonicas, Catabacter hongkongensis, Clostridium sporosphaeroides and Faecalibacterium prausnitzii.*

3. The method of claim 1, wherein the abundance of at least 10 species of bacteria is determined.

4. The method of claim 1, wherein the abundance of at least 20 species of bacteria is determined.

5. A method of determining a suitable treatment for a subject with a dysbiosis,

comprising determining the subtype of IBS according to the method of any one of claims 1 to 4, and determining a suitable treatment based on the results of the determination of subtype of IBS.

6. The method of any one of claims 1 to 5, wherein the subject is a human.

7. The method of any one of claims 1 to 6, wherein the subject has previously been administered a chemotherapy or an antibiotic.