**Claims**

1. Use of ibezapolstat in the manufacture of a medicament for simultaneously treating a *C. difficile* infection and reducing the likelihood of or preventing the recurrence of *C. difficile* infection, wherein an effective amount of the ibezapolstat is to be administered to a human subject suffering from a *C. difficile* infection, wherein the administration of the effective amount of the ibezapolstat simultaneously treats the *C. difficile* infection and reduces the likelihood or prevents recurrence of *C. difficile* infection within 90 days.

2. The use of claim 1, wherein the administration of the ibezapolstat is to be continued until a clinical cure of the *C. difficile* infection is achieved.

3. The use of claim 1, wherein the administration of the ibezapolstat is to be terminated when a clinical cure of the *C. difficile* infection is achieved.

4. The use of claim 1, wherein the administration of the effective amount of the ibezapolstat reduces the likelihood or prevents recurrence of *C. difficile* infection within 30 days.

5. Use of ibezapolstat in the manufacture of a medicament for treating a *C. difficile* infection, wherein an effective amount of the ibezapolstat is to be administered to a subject suffering from a *C. difficile* infection, wherein the administration of the effective amount of the ibezapolstat results in a change in the relative abundance of bacterial taxa in the subject's gut microbiome.

6. The use of claim 5, wherein the administration of the effective amount of the ibezapolstat results in a different gut microbiome profile compared to administration of vancomycin.

7. The use of claim 6, wherein the amount of the ibezapolstat administered is at least about 300 mg and the amount of the vancomycin administered is at least about 125 mg.

8. The use of claim 5, wherein the administration of the effective amount of the ibezapolstat is measured by the presence of *C. difficile* toxins in the gut microbiome.

9. The use of claim 5, wherein the administration of the effective amount of the ibezapolstat includes an overgrowth of Actinobacteria and Firmicutes phylum species.

10. Use of ibezapolstat in the manufacture of a medicament for reducing the likelihood of *C. difficile* infection and/or preventing the recurrence of *C. difficile* infection in a subject, wherein an effective amount of the ibezapolstat is to be administered to the subject, wherein the administration of the ibezapolstat results in a change in the relative abundance of bacterial taxa, and wherein the subject is suffering from a *C. difficile* infection or is susceptible to a recurrence of a *C. difficile* infection.

11. The use of claim 10, wherein the prevention of *C. difficile* infection is measured by the proportion of Firmicutes and/or Bacteroidetes to Proteobacteria in the gut microbiome.

12. The use of claim 10, wherein the administration of the ibezapolstat results in a greater number of Firmcutes and/or Bacteroidetes in the gut microbiome that in the gut microbiome of subjects treated with vancomycin.

13. The use of claim 12, wherein the amount of the ibezapolstat administered is at least about 300 mg and the amount of the vancomycin administered is at least about 125 mg.