

A tiacumicin compound, a stereo-isomer thereof, a polymorph thereof or a pharmaceutically acceptable solvate thereof, and a pharmaceutical composition, containing a tiacumicin compound, a stereo-isomer thereof, a polymorph thereof or a pharmaceutically acceptable solvate thereof, are provided for use in the oral treatment of *Clostridium difficile* infections (COI) or *Clostridium difficile* associated diarrhea or disease (CD AD) in a patient in accordance with a dosage regimen selected from the group consisting of: i. Administering 200 nig of the tiacumicin compound BID for 5 days followed by 5 days of rest and then 200 nig once daily for a further 10 days and ii. Administering 200 nig of the tiacumicin compound HID for 5 days followed by a single 200 mg every other day for 20 days. Further, a method is provided for recovering of gut Bifidobacteria population in a patient, suffering from *Clostridium difficile* infections (CDF) or *Clostridium difficile* associated diarrhea or disease (CD AD) and receiving oral treatment with a tiacumicin compound, to 50 to 90 % of the gut Bifidobacteria population prior to administering the tiacumicin compound during days 15-45 after start of the treatment by orally administering the tiacumicin compound to the patient according to a dosage regimen, which is selected from the above-mentioned group.