

Figure S1: Heterogeneous distribution of *C. difficile* over the cecal tissue in a mono-associated mouse model. Confocal laser-scanning microscopy 3-D projection of tissue-associated bacteria obtained from cecum for the CD17-146 without or with treatment of MTZ at 0.125 mg/kg, and the VPI 10463 without or with treatment of MTZ 0.125 mg/kg. Live cells (bacterial [rod] or epithelial) are labeled in green, dead cells are labeled in red. Scale bars (white): 30  $\mu$ m.

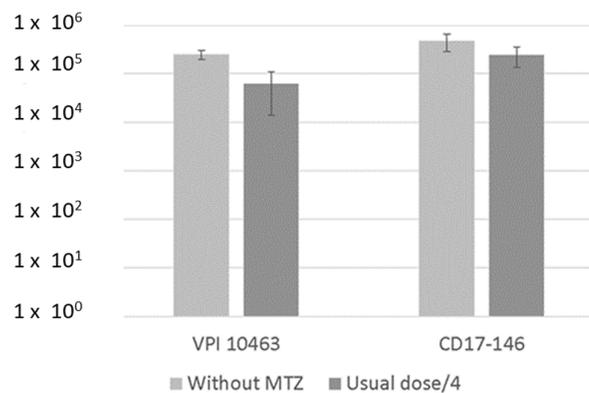


Figure S2. Impact of MTZ on cecum colonization of *C. difficile* in monoxenic mice, 7 days post-infection. Germ-free mice were infected by either VPI 10463 (group A and B) or CD17-146 (group C and D) strain with  $5 \times 10^5$  CFU of *C. difficile*. From 1-day post-infection, mice were treated with sterile water (group A and C) or with a quart of usual dose of MTZ: 12.5 mg/kg (group B and D) for 7 days by oral gavage twice a day. *C. difficile* shedding was monitored in feces at day 7 post-infection. There were no significant differences in colonization between the group treated with MTZ at usual dose/4 and the group non-treated for both strains. The error bars represent standard error of the mean (SEM).

Table S1 : Sequences of oligonucleotide primers used in this study

<b>Name</b>	<b>Sequence (5' to 3')</b>
flgBF	GCAACTAATCTAAGAAGTCAGACAATAGC
flgBR	AGGCATAGCATCATTTAGTGTTTCTTC
fliAF	GAATATGCCTCTTGTAAGAGTATAGCA
fliAR	TGCATCAATCAATCCAATGACTCC
gluDF	CAGTAGGGCCAACAAAAGGT
gluDR	TCCACCTTTACCTCCACCAT
fliC146F	TTAACACAATTAAGAGATGAGATTGAAAGA
fliC146R	AAACATTAGTTCCATAACTCTCCAACG
fliCVPIF	GAATCAAGAATAAGAGATACAGATGTTG
fliCVPIR	ATAATTGTAAAACCTCCTTGTGGTTGTTG