Table 4: Relative abundance of top phyla based on the number of antimicrobial treatments (NumTrt) and day in NP microbiome of stocker calves.

|  |  |  |
| --- | --- | --- |
| Phylum | NumTrt1 | Day2 |
| 0x | 1x | 2x | *P-*value | Day 0 | Day 7 | Day 14 | Day 21 | *P-*value |
| *Firmicutes* | 0.69 ± 0.03 | 0.72 ± 0.04 | 0.77 ± 0.06 | 0.46 | 0.69 ± 0.05 | 0.83 ± 0.05 | 0.72 ± 0.05 | 0.68 ± 0.05 | 0.05 |
| *Proteobacteria* | 0.21 ± 0.02 | 0.15 ± 0.04 | 0.18 ± 0.05 | 0.36 | 0.15 ± 0.04bc | 0.09 ± 0.04c | 0.21 ± 0.04ab | 0.27 ± 0.04a | 0.03 |
| *Actinobacteriota* | 0.06 ± 0.02ab | 0.09 ± 0.02a | 0.02 ± 0.04b | 0.02 | 0.12 ± 0.03a | 0.05 ± 0.03b | 0.05 ± 0.03b | 0.01 ± 0.02b | < 0.0001 |
| *Bacteroidota* | 0.02 ± 0.006 | 0.03 ± 0.009 | 0.02 ± 0.01 | 0.15 | 0.03 ± 0.01a | 0.01 ± 0.01b | 0.009 ± 0.01b | 0.04 ± 0.01b | 0.002 |
| *Verrucomicrobiota* | 0.003 ± 0.0005 | 0.002 ± 0.0007 | 0.003 ± 0.001 | 0.13 | 0.005 ± 0.0008a | 0.001 ± 0.0008b | 0.002 ± 0.0009b | 0.002 ± 0.0009b | 0.0001 |

1NumTrt was defined based on the number of antibiotic treatments they received (**0x**: never treated; **1x**: treated once; **2x**: treated 2 times).

2Day 0, Day 7, Day 14, and Day 21 denotes the day relative to calves’ arrival to the stocker farm.

abWithin each row, means with unlike letters differ significantly (*P* < 0.05).