**Supplementary Table 7. Taxa with significant difference in content between groups.**

Genus level:

|  |  |  |
| --- | --- | --- |
| AB | BC | BD |
| Acinetobacter | Corynebacterium | Blautia |
| Corynebacterium | Peptostreptococcus | Cobetia |
| Peptostreptococcus | Blautia | Nocardia |
| Fusobacterium | Cobetia | Clostridium\_sensu\_stricto |
| Stenotrophomonas | Nocardia | Faucicola |
| Streptobacillus | Weissella | Faecalibacterium |
| Veillonella | Lactococcus | Johnsonella |
| Blautia | Cetobacterium | Mycoplasma |
| Cobetia | Roseburia | Desulfobulbus |
| Nocardia | Ruminococcus | Methanobrevibacter |
| Alloscardovia | Shuttleworthia | Vulcaniibacterium |
| Gaiella |  | Actinomyces |
| Neisseria |  | Burkholderia |
| Ohtaekwangia |  | Phascolarctobacterium |
| Rothia |  | Schlegelella |
| Intrasporangium |  |  |
| Moraxella |  |  |
| Faecalibacterium |  |  |
| Johnsonella |  |  |
| Mycoplasma |  |  |
| Aerococcus |  |  |
| Atopobium |  |  |
| Butyrivibrio |  |  |
| Fusicatenibacter |  |  |
| Lactobacillus |  |  |
| Pantoea |  |  |
| Sediminibacterium |  |  |

Species level:

|  |  |  |
| --- | --- | --- |
| AB | BC | BD |
| *Acinetobacter\_nosocomialis* | **Lactobacillus\_fermentum** | Acinetobacter\_nosocomialis |
| *Streptobacillus\_moniliformis* | Corynebacterium\_matruchotii | Streptococcus\_sobrinus |
| *Streptococcus\_sobrinus* | Peptostreptococcus\_stomatis | **Lactobacillus\_fermentum** |
| ***Lactobacillus\_fermentum*** | Dialister\_micraerophilus | **Blautia\_wexlerae** |
| *Campylobacter\_rectus* | **Blautia\_wexlerae** | Cobetia\_amphilecti |
| *Lactobacillus\_salivarius* | Cobetia\_amphilecti | **Nocardia\_coeliaca** |
| *Leptotrichia\_hongkongensis* | **Nocardia\_coeliaca** | **Selenomonas\_artemidis** |
| *Pseudomonas\_beteli* | **Selenomonas\_artemidis** | Faecalibacterium\_prausnitzii |
| *Veillonella\_dispar* | Olsenella\_uli | Johnsonella\_ignava |
| *Corynebacterium\_matruchotii* | Weissella\_cibaria | Lactobacillus\_sanfranciscensis |
| *Peptostreptococcus\_stomatis* | Actinomyces\_cardiffensis | Mycoplasma\_faucium |
| *Dialister\_micraerophilus* | Cetobacterium\_somerae | Faucicola\_mancuniensis |
| *Alloscardovia\_omnicolens* | Eubacterium\_yurii\_subsp.\_schtitka | Vulcaniibacterium\_thermophilum |
| *Ohtaekwangia\_koreensis* | Lactobacillus\_animalis | Aggregatibacter\_actinomycetemcomitans |
| ***Blautia\_wexlerae*** | Lactococcus\_lactis\_subsp.\_tructae | Dialister\_invisus |
| *Cobetia\_amphilecti* | Roseburia\_inulinivorans | Lactobacillus\_iners |
| ***Nocardia\_coeliaca*** | Ruminococcus\_bromii | Mycoplasma\_salivarium |
| ***Selenomonas\_artemidis*** | Shuttleworthia\_satelles | Parabacteroides\_goldsteinii |
| *Faecalibacterium\_prausnitzii* |  | Peptococcus\_niger |
| *Gaiella\_occulta* |  |  |
| *Porphyromonas\_gingivalis* |  |  |
| *Prevotella\_aurantiaca* |  |  |
| *Rothia\_mucilaginosa* |  |  |
| *Johnsonella\_ignava* |  |  |
| *Lactobacillus\_sanfranciscensis* |  |  |
| *Mycoplasma\_faucium* |  |  |
| *Olsenella\_uli* |  |  |
| *Actinomyces\_georgiae* |  |  |
| *Fusicatenibacter\_saccharivorans* |  |  |
| *Actinomyces\_timonensis* |  |  |
| *Aerococcus\_urinaeequi* |  |  |
| *Haemophilus\_sputorum* |  |  |
| *Megasphaera\_micronuciformis* |  |  |
| *Neisseria\_oralis* |  |  |
| *Prevotella\_oris* |  |  |
| *Sediminibacterium\_goheungense* |  |  |
| *Streptococcus\_mutans* |  |  |