**Supplemental Table 3.** Bacteria with significantly different abundances at the order, family, and genus levels between baseline and four weeks (n=28, log2|fold change| ≥ 2 and FDR-adjusted p < 0.05)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Bacteria** | **Relative abundance at baseline, in %**  **Median (IQR)** | **Relative abundance at week 4, in %**  **Median (IQR)** | **Week 4 vs Baseline** | |
| **Log 2 FC**  **mean ± SE** | **Adjusted**  ***P*-value1** |
| **Order** | | | | |
| Micrococcales | 4.52E-04 (3.20E-04 - 5.54E-03) | 6.52E-04 (1.58E-04 - 3.30E-03) | 2.86±0.73 | 2.68E-03 |
| **Family** | | | | |
| Leuconostocaceae | 8.72E-04 (2.52E-04 - 5.95E-03) | 4.46E-02 (1.13E-03 - 1.55E+00) | 7.83±0.88 | 4.97E-17 |
| Hafniaceae | 0.00E+00 (0.00E+00 - 3.83E-03) | 2.82E-03 (3.84E-04 - 7.25E-03) | 6.80±1.13 | 4.47E-08 |
| Lactobacillaceae | 1.28E-02 (5.07E-03 - 5.48E-02) | 3.93E-02 (9.52E-03 - 2.25E+00) | 4.86±0.78 | 1.32E-08 |
| Morganellaceae | 3.74E-04 (0.00E+00 - 3.10E-03) | 6.22E-04 (2.59E-05 - 1.04E-02) | 4.71±1.06 | 1.64E-04 |
| Prevotellaceae | 1.27E-03 (8.13E-05 - 1.24E-01) | 1.45E-04 (1.98E-05 - 2.67E-03) | -4.85±1.13 | 2.57E-04 |
| Sutterellaceae | 3.13E-04 (0.00E+00 - 2.68E-03) | 4.56E-05 (0.00E+00 - 1.69E-03) | -3.82±1.13 | 7.06E-03 |
| Atopobiaceae | 7.29E-04 (3.16E-05 - 7.94E-03) | 4.38E-05 (0.00E+00 - 1.15E-03) | -3.06±0.88 | 6.28E-03 |
| Microbacteriaceae | 3.16E-04 (7.29E-05 - 1.02E-03) | 5.83E-05 (0.00E+00 - 2.70E-04) | -2.27±0.75 | 2.01E-02 |
| **Genus** | | | | |
| Leuconostoc | 4.06E-04 (1.04E-04 - 1.52E-03) | 1.95E-02 (9.03E-04 - 1.55E+00) | 8.41±0.94 | 6.08E-17 |
| Hafnia | 0.00E+00 (0.00E+00 - 4.56E-04) | 1.63E-04 (3.58E-05 - 6.69E-03) | 7.46±1.41 | 3.95E-06 |
| Tetragenococcus | 0.00E+00 (0.00E+00 - 0.00E+00) | 0.00E+00 (0.00E+00 - 8.40E-05) | 5.43±1.55 | 5.86E-03 |
| Raoultella | 8.85E-05 (0.00E+00 - 8.70E-04) | 2.88E-04 (8.89E-05 - 2.49E-03) | 5.33±0.97 | 1.31E-06 |
| Morganella | 0.00E+00 (0.00E+00 - 2.89E-04) | 6.18E-05 (0.00E+00 - 3.52E-03) | 5.29±1.33 | 1.30E-03 |
| Lactobacillus | 8.43E-03 (3.97E-03 - 4.27E-02) | 3.70E-02 (5.41E-03 - 2.25E+00) | 5.05±0.85 | 1.63E-07 |
| Proteus | 4.00E-05 (0.00E+00 - 1.89E-04) | 2.32E-04 (0.00E+00 - 2.22E-03) | 4.68±1.12 | 5.79E-04 |
| Weissella | 1.95E-04 (0.00E+00 - 8.07E-04) | 8.91E-04 (1.50E-04 - 1.26E-02) | 4.52±0.74 | 1.31E-07 |
| Carnobacterium | 3.81E-04 (9.14E-05 - 3.21E-03) | 9.36E-04 (2.77E-04 - 2.77E-02) | 4.37±0.84 | 4.64E-06 |
| Edwardsiella | 0.00E+00 (0.00E+00 - 5.46E-04) | 5.11E-04 (1.33E-04 - 2.46E-03) | 4.32±0.96 | 1.49E-04 |
| Erwinia | 5.41E-05 (0.00E+00 - 4.38E-04) | 2.79E-04 (0.00E+00 - 1.56E-03) | 3.51±0.97 | 4.33E-03 |
| Lelliottia | 0.00E+00 (0.00E+00 - 4.24E-04) | 2.97E-04 (0.00E+00 - 8.75E-04) | 3.26±1.01 | 1.34E-02 |
| Pediococcus | 2.26E-04 (5.29E-05 - 5.56E-04) | 2.84E-04 (0.00E+00 - 1.22E-03) | 3.06±0.82 | 2.99E-03 |
| Yersinia | 1.80E-05 (0.00E+00 - 8.49E-04) | 7.17E-04 (9.73E-05 - 3.57E-03) | 2.57±0.95 | 4.58E-02 |
| Leclercia | 0.00E+00 (0.00E+00 - 7.66E-05) | 7.67E-05 (0.00E+00 - 2.41E-04) | 2.32±0.85 | 4.58E-02 |
| Lactococcus | 1.21E-02 (3.41E-03 - 2.75E-02) | 1.84E-02 (5.19E-03 - 4.85E-02) | 2.01±0.61 | 1.02E-02 |
| Rummeliibacillus | 0.00E+00 (0.00E+00 - 1.68E-04) | 0.00E+00 (0.00E+00 - 0.00E+00) | -10.57±1.90 | 1.17E-06 |
| Brevibacillus | 0.00E+00 (0.00E+00 - 1.22E-04) | 0.00E+00 (0.00E+00 - 0.00E+00) | -8.30±1.40 | 1.63E-07 |
| Aneurinibacillus | 2.81E-05 (0.00E+00 - 1.92E-04) | 0.00E+00 (0.00E+00 - 0.00E+00) | -4.70±1.13 | 6.68E-04 |
| Sutterella | 3.13E-04 (0.00E+00 - 2.68E-03) | 4.56E-05 (0.00E+00 - 1.69E-03) | -4.13±1.10 | 2.81E-03 |
| Thermobacillus | 0.00E+00 (0.00E+00 - 1.01E-04) | 0.00E+00 (0.00E+00 - 0.00E+00) | -3.67±1.25 | 2.95E-02 |
| Prevotella | 4.90E-04 (4.11E-05 - 1.24E-01) | 1.45E-04 (1.98E-05 - 1.66E-03) | -3.58±1.17 | 2.26E-02 |
| Lysinibacillus | 0.00E+00 (0.00E+00 - 8.82E-05) | 0.00E+00 (0.00E+00 - 0.00E+00) | -3.08±1.11 | 4.32E-02 |
| Olsenella | 6.22E-04 (3.16E-05 - 6.08E-03) | 4.38E-05 (0.00E+00 - 1.04E-03) | -3.06±0.87 | 5.76E-03 |
| Mediterranea | 7.25E-05 (0.00E+00 - 5.94E-04) | 0.00E+00 (0.00E+00 - 8.71E-05) | -2.93±1.08 | 4.58E-02 |
| Traorella | 4.28E-05 (0.00E+00 - 4.24E-04) | 0.00E+00 (0.00E+00 - 0.00E+00) | -2.68±0.93 | 3.33E-02 |
| Faecalicatena | 7.58E-04 (7.63E-05 - 1.82E-03) | 9.69E-05 (0.00E+00 - 4.14E-04) | -2.18±0.73 | 2.57E-02 |
| Bacillus | 8.34E-04 (4.01E-04 - 2.55E-03) | 3.54E-04 (9.40E-05 - 1.20E-03) | -2.03±0.61 | 1.01E-02 |

1 p values were adjusted with false discovery rate for multiple comparisons