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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Phylum | Classification | Treatment P-Value | Time P-Value | Interaction P-Value | OVX+DHT vs OVX+P P-Value | OVX+DHT vs SHAM+DHT P-Value | OVX+DHT vs SHAM+P P-Value | OVX+P vs SHAM+DHT P-Value | OVX+P vs SHAM+P P-Value | SHAM+DHT vs SHAM+P P-Value |
| Firmicutes | Lactobacillus | 0.00000\* | 0.01014\* | 0.71993 | 0.0312\* | 0.9290 | 0.8484 | 0.0066\* | 0.0037\* | 0.9970 |
| Firmicutes | Lactobacillus | 0.00001\* | 0.01031\* | 0.22436 | 0.0144\* | 0.9916 | 0.9988 | 0.0068\* | 0.0094\* | 0.9991 |
| Firmicutes | Lactobacillus | 0.00001\* | 0.01606\* | 0.33317 | 0.0147\* | 0.9607 | 0.9740 | 0.0040\* | 0.0402\* | 0.7963 |
| Bacteroidetes | Bacteroidales | 0.00004\* | 0.00555\* | 0.70922 | 0.4089 | 0.0358\* | 0.9622 | 0.0005\* | 0.6965 | 0.0104\* |
| Bacteroidetes | S24-7 | 0.00013\* | 0.06724 | 0.21414 | 0.7075 | 0.9763 | 0.0606 | 0.9094 | 0.4391 | 0.1438 |
| Bacteroidetes | Bacteroidales | 0.00036\* | 0.00670\* | 0.91186 | 0.2024 | 0.0039\* | 0.9995 | 0.3581 | 0.1641 | 0.0028\* |
| Firmicutes | Lactobacillus | 0.00037\* | 0.00440\* | 0.56983 | 0.0256\* | 0.3638 | 0.7886 | 0.0003\* | 0.0021\* | 0.8853 |
| Bacteroidetes | Bacteroidales | 0.00087\* | 0.03516\* | 0.65759 | 0.7265 | 0.1685 | 0.9900 | 0.0167\* | 0.8799 | 0.0905 |
| Bacteroidetes | Rikenellaceae | 0.00087\* | 0.08794 | 0.03934\* | 0.8407 | 0.2773 | 0.9958 | 0.0548 | 0.9303 | 0.1868 |
| Bacteroidetes | S24-7 | 0.00158\* | 0.05580 | 0.15555 | 0.4207 | 1.0000 | 0.0703 | 0.4361 | 0.7641 | 0.0746 |
| Bacteroidetes | Rikenellaceae | 0.00222\* | 0.01182\* | 0.14959 | 0.9916 | 0.0166\* | 0.0366\* | 0.0348\* | 0.0727 | 0.9870 |
| Firmicutes | L. vaginalis | 0.00255\* | 0.04379\* | 0.04812\* | 0.0500 | 0.9900 | 0.9737 | 0.0243\* | 0.1213 | 0.8836 |
| Deferribacteres | M. schaedleri | 0.00603\* | 0.00634\* | 0.25809 | 0.0022\* | 0.0053\* | 0.0131\* | 0.9869 | 0.9018 | 0.9848 |
| Bacteroidetes | S24-7 | 0.01299\* | 0.00440\* | 0.22436 | 0.9038 | 0.0056\* | 0.0877 | 0.0009\* | 0.0183\* | 0.6722 |
| Bacteroidetes | Rikenellaceae | 0.02572\* | 0.38709 | 0.16063 | 0.8423 | 0.8164 | 0.9697 | 0.3379 | 0.9812 | 0.5531 |
| Bacteroidetes | S24-7 | 0.02572\* | 0.00120\* | 0.17192 | 0.0366\* | 0.0002\* | 0.0000\* | 0.2634 | 0.0925 | 0.9462 |
| Bacteroidetes | S24-7 | 0.02572\* | 0.00850\* | 0.17192 | 0.0479\* | 0.0144\* | 0.0015\* | 0.9639 | 0.5814 | 0.8510 |
| Bacteroidetes | S24-7 | 0.02884\* | 0.01335\* | 0.03934\* | 0.0174\* | 0.8885 | 0.0209\* | 0.0924 | 0.9996 | 0.1091 |
| Bacteroidetes | Bacteroidales | 0.02956\* | 0.00761\* | 0.47706 | 0.7241 | 0.0241\* | 0.9993 | 0.0015\* | 0.6493 | 0.0317\* |
| Deferribacteres | M. schaedleri | 0.03092\* | 0.00428\* | 0.08629 | 0.0004\* | 0.0013\* | 0.0023\* | 0.9721 | 0.9130 | 0.9962 |
| Bacteroidetes | Bacteroidales | 0.03998\* | 0.09314 | 0.16550 | 0.7608 | 0.4291 | 0.9382 | 0.0755 | 0.9765 | 0.1677 |
| Bacteroidetes | Rikenellaceae | 0.03998\* | 0.00555\* | 0.20091 | 0.0019\* | 0.0024\* | 0.0105\* | 0.9997 | 0.9163 | 0.9450 |
| Bacteroidetes | S24-7 | 0.04026\* | 0.00555\* | 0.47706 | 0.8356 | 0.1877 | 0.0007\* | 0.6280 | 0.0084\* | 0.1396 |
| Bacteroidetes | Rikenellaceae | 0.04077\* | 0.13394 | 0.03934\* | 0.6838 | 0.6010 | 0.9497 | 0.1035 | 0.9376 | 0.2966 |
| Bacteroidetes | Bacteroidales | 0.04717\* | 0.06420 | 0.07749 | 0.5861 | 0.4042 | 0.9991 | 0.0354\* | 0.5015 | 0.4767 |
| Bacteroidetes | Bacteroidales | 0.04717\* | 0.01217\* | 0.19256 | 0.9669 | 0.0052\* | 0.9492 | 0.0183\* | 0.9999 | 0.0206\* |
| Bacteroidetes | Bacteroidales | 0.04799\* | 0.00923\* | 0.25809 | 0.7643 | 0.0270\* | 0.6838 | 0.0021\* | 0.1766 | 0.2689 |
| Firmicutes | Clostridiales | 0.08710 | 0.02283\* | 0.51773 | 0.8945 | 0.0675 | 0.5749 | 0.0126\* | 0.2097 | 0.5830 |
| Bacteroidetes | S24-7 | 0.10942 | 0.12716 | 0.02639\* | 0.3849 | 0.9967 | 0.3094 | 0.2811 | 0.9992 | 0.2187 |
| Bacteroidetes | Bacteroidales | 0.11830 | 0.06420 | 0.04812\* | 0.2257 | 0.8028 | 0.9303 | 0.0345\* | 0.5367 | 0.4426 |
| Bacteroidetes | Bacteroidales | 0.18299 | 0.03653\* | 0.65759 | 0.5245 | 0.2930 | 0.8880 | 0.0161\* | 0.9125 | 0.0738 |
| Deferribacteres | M. schaedleri | 0.18299 | 0.28990 | 0.65759 | 0.3527 | 0.4242 | 0.3537 | 0.9990 | 1.0000 | 0.9993 |
| Bacteroidetes | Rikenellaceae | 0.18546 | 0.04224\* | 0.32714 | 0.3472 | 0.8798 | 0.2077 | 0.0913 | 0.9908 | 0.0447\* |
| Bacteroidetes | Bacteroidales | 0.20081 | 0.03014\* | 0.22436 | 0.7524 | 0.4596 | 0.3254 | 0.0820 | 0.8890 | 0.0141\* |
| Bacteroidetes | Bacteroidales | 0.33653 | 0.02638\* | 0.17192 | 0.5290 | 0.1894 | 0.9956 | 0.0085\* | 0.3928 | 0.2791 |
| Firmicutes | Clostridiales | 0.38256 | 0.04379\* | 0.47706 | 0.0593 | 0.8829 | 0.9995 | 0.2513 | 0.0452\* | 0.8321 |
| Deferribacteres | M. schaedleri | 0.44983 | 0.02283\* | 0.91186 | 0.0140\* | 0.2699 | 0.0284\* | 0.5196 | 0.9892 | 0.7040 |
| Firmicutes | Lachnospiraceae | 0.44983 | 0.08967 | 0.16703 | 0.9824 | 0.3469 | 0.0813 | 0.5662 | 0.1759 | 0.8614 |
| Deferribacteres | M. schaedleri | 0.49026 | 0.02645\* | 0.08629 | 0.3080 | 0.0107\* | 0.0457\* | 0.4263 | 0.7791 | 0.9316 |
| Firmicutes | Clostridiales | 0.49547 | 0.04091\* | 0.42787 | 0.6577 | 0.5912 | 0.3644 | 0.0921 | 0.9619 | 0.0295\* |
| Firmicutes | Lachnospiraceae | 0.63354 | 0.06724 | 0.25809 | 0.9741 | 0.9656 | 0.0546 | 1.0000 | 0.1387 | 0.1469 |
| Bacteroidetes | S24-7 | 0.70627 | 0.00634\* | 0.32714 | 0.3245 | 0.2820 | 0.1829 | 0.0060\* | 0.0030\* | 0.9948 |
| Firmicutes | Lachnospiraceae | 0.73101 | 0.22451 | 0.19944 | 0.8364 | 0.9058 | 0.1572 | 0.9984 | 0.5687 | 0.4644 |
| Bacteroidetes | Rikenellaceae | 0.76713 | 0.06420 | 0.02639\* | 0.9870 | 0.1621 | 0.0971 | 0.2943 | 0.1905 | 0.9944 |
| Firmicutes | Lachnospiraceae | 0.76713 | 0.00942\* | 0.20091 | 0.9332 | 0.8704 | 0.0034\* | 0.9984 | 0.0175\* | 0.0253\* |
| Bacteroidetes | S24-7 | 0.77409 | 0.00440\* | 0.02639\* | 0.4632 | 0.0034\* | 0.0011\* | 0.1301 | 0.0572 | 0.9811 |
| Firmicutes | Roseburia | 0.88644 | 0.09314 | 0.20091 | 0.9998 | 0.9963 | 0.1824 | 0.9990 | 0.1611 | 0.1197 |
| Firmicutes | Allobaculum | 0.88644 | 0.02554\* | 0.04405\* | 0.9979 | 0.0445\* | 0.2122 | 0.0299\* | 0.1549 | 0.8678 |
| Firmicutes | Clostridiales | 0.88644 | 0.02924\* | 0.42207 | 0.0372\* | 0.9452 | 0.9994 | 0.1243 | 0.0275\* | 0.9078 |
| Firmicutes | Clostridium | 0.88644 | 0.09323 | 0.41522 | 0.9996 | 0.9884 | 0.1330 | 0.9737 | 0.1099 | 0.2404 |