|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S2 Table. Spearman's correlation coefficients and p-values between the lung function and the three AMPs stratified by study group, and the relative abundance (%) of the two most common phyla and three most common genera. For the categorical variables smoking (never, ex, current), and use of inhaled steroids (in COPD only), the correlation was assessed by Kruskal-Wallis tests, and p-values provided.** | | | | | | | | | | | | |
| 2 |  | **Phylum** | | | | **Genus** | | | | | | |
|  |  | Firmicutes | | Bacteroidetes | | Streptococcus | | Prevotella | | Veillonella | | |
|  |  | *rho* | *p* | *rho* | *p* | *rho* | *p* | *rho* | *p* | *rho* | *p* |
|  | FVC % predicted | -0.04 | 0.9 | -0.02 | 0.9 | -0.3 | 0.3 | 0.3 | 0.4 | 0.7 | 0.02 |
|  | FEV1 % predicted | 0.2 | 0.5 | 0.3 | 0.4 | 0.1 | 0.6 | 0.6 | 0.04 | 0.6 | 0.04 |
|  | DLCO % predicted | -0.2 | 0.5 | -0.1 | 0.7 | -0.6 | 0.04 | -0.07 | 0.8 | 0.2 | 0.6 |
| **IPF** | SLPI | -0.4 | 0.3 | -0.1 | 0.7 | -0.09 | 0.8 | -0.4 | 0.2 | -0.9 | 0.0008 |
|  | hBD-1 | -0.6 | 0.03 | 0.3 | 0.4 | -0.8 | 0.007 | 0.1 | 0.8 | -0.2 | 0.6 |
|  | hBD-2 | 0.5 | 0.2 | -0.1 | 0.8 | 0.5 | 0.2 | 0.2 | 0.6 | -0.7 | 0.7 |
|  | Smoking |  | 0.2 |  | 0.3 |  | 0.3 |  | 0.2 |  | 0.3 |
|  | FVC % predicted | -0.4 | 0.2 | 0.4 | 0.2 | -0.4 | 0.2 | 0.3 | 0.3 | -0.2 | 0.6 |
|  | FEV1 % predicted | 0.3 | 0.3 | -0.2 | 0.5 | 0.2 | 0.5 | -0.1 | 0.7 | -0.5 | 0.1 |
|  | DLCO % predicted | -0.3 | 0.6 | 0.3 | 0.5 | -0.5 | 0.3 | 0.3 | 0.5 | 0.4 | 0.5 |
| **COPD** | SLPI | -0.3 | 0.3 | 0.5 | 0.1 | -0.5 | 0.1 | 0.3 | 0.4 | 0.4 | 0.2 |
|  | hBD-1 | 0.2 | 0.5 | 0.04 | 0.9 | -0.2 | 0.5 | -0.1 | 0.7 | 0.6 | 0.03 |
|  | hBD-2 | -0.09 | 0.8 | -0.2 | 0.5 | 0.4 | 0.2 | -0.4 | 0.2 | -0.1 | 0.8 |
|  | Smoking |  | 0.3 |  | 0.3 |  | 0.3 |  | 0.4 |  | 0.2 |
|  | Inhaled steroid use |  | 0.3 |  | 0.3 |  | 0.4 |  | 0.1 |  | 0.6 |
|  | FVC % predicted | 0.3 | 0.4 | -0.2 | 0.6 | 0.4 | 0.2 | -0.4 | 0.1 | -0.3 | 0.3 |
|  | FEV1 % predicted | 0.2 | 0.5 | -0.04 | 0.9 | 0.3 | 0.3 | -0.2 | 0.5 | 0.04 | 0.9 |
|  | DLCO % predicted | -0.2 | 0.7 | 0.4 | 0.4 | -0.1 | 0.8 | 0.009 | 1.0 | -0.2 | 0.6 |
| **Controls** | SLPI | -0.5 | 0.1 | 0.3 | 0.4 | -0.2 | 0.4 | 0.2 | 0.5 | -0.06 | 0.8 |
|  | hBD-1 | 0.05 | 0.9 | -0.07 | 0.8 | 0.1 | 0.7 | -0.2 | 0.6 | -0.2 | 0.4 |
|  | hBD-2 | -0.1 | 0.7 | 0.2 | 0.5 | -0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.2 |
|  | smoking |  | 1.0 |  | 0.1 |  | 0.5 |  | 0.4 |  | 0.2 |
|  | FVC % predicted | 0.09 | 0.6 | 0.1 | 0.5 | 0.1 | 0.5 | -0.01 | 1.0 | -0.1 | 0.5 |
|  | FEV1 % predicted | 0.02 | 0.9 | 0.3 | 0.1 | -0.07 | 0.7 | 0.4 | 0.02 | 0.1 | 0.5 |
|  | DLCO % predicted | -0.009 | 1.0 | 0.2 | 0.3 | -0.2 | 0.3 | 0.2 | 0.3 | -0.01 | 1.0 |
| **All subjects** | SLPI | -0.2 | 0.2 | 0.1 | 0.4 | -0.2 | 0.4 | -0.1 | 0.4 | -0.1 | 0.4 |
|  | hBD-1 | 0.1 | 0.6 | -0.1 | 0.5 | 0.1 | 0.6 | -0.3 | 0.1 | -0.07 | 0.7 |
|  | hBD-2 | -0.1 | 0.4 | -0.08 | 0.6 | 0.006 | 1.0 | 0.03 | 0.9 | 0.04 | 0.8 |
|  | smoking |  | 0.5 |  | 0.03 |  | 0.3 |  | 0.03 |  | 0.4 |