**Supplementary Table 1. Features of study participants**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Characteristics** | **Control** | **Asthma** | ***P*\*** | **Asthma** |  | ***P*\*\*** |
| **Low FENO**  **(< 35 ppb)** | **High FENO**  **(≥ 35 ppb)** |
| N | 156 | 525 |  | 267 | 166 |  |
| Mean age, yr. | 30(1) | 39(1) | <0.0001 | 39(1) | 39(1) | 0.8 |
| Gender, M/F | 59/97 | 188/337 | 0.6 | 79/188 | 69/97 | 0.01 |
| Ethnicity, C/AA/other | 156/0/0 | 527/0/0 |  | 268/0/0 | 168/0/0 |  |
| BMI, kg/m2 | 25.3(0.4) | 29.1(0.3) | <0.0001 | 30.1(0.5) | 27.7(0.4) | 0.0004 |
| Asthma severity, % severe asthmatics | 0 | 40 | <0.0001 | 36 | 41 | 0.3 |
| Lung function |  |  |  |  |  |  |
| FEV1 % predicted | 100(1) | 73(1) | <0.0001 | 73(1) | 74(2) | 0.8 |
| FEV1/FVC | 0.82(0.01) | 0.69(0.01) | <0.0001 | 0.70(0.01) | 0.68(0.01) | 0.14 |
| PC20, mg/ml | NR# | 3.8(0.2) | <0.0001 | 4.6(0.4) | 2.7(0.4) | 0.002 |
| Blood work |  |  |  |  |  |  |
| Eosinophils, %& | 2.1(0.1) | 3.8(0.1) | <0.0001 | 3.2(0.1) | 4.8(0.2) | <0.0001 |
| IgE, IU/ml | 49(7) | 202(14) | <0.0001 | 155(13) | 254(23) | 0.004 |
| Arginase activity,  μmol/ml/h | 0.21(0.03) | 0.46(0.04) | <0.0001 | 0.40(0.05) | 0.55(0.06) | 0.01 |
| FENO, ppb | 16(1) | 40(2) | <0.0001 | 18(1) | 76(3) | <0.0001 |

Results are presented as Mean (SEM);

Definition of abbreviations: M, male; F, female; C, Caucasian; AA, African American; BMI, body mass index; FEV1, Forced expiratory volume in 1 second; FVC, Forced vital capacity; PC20, provocative concentration of methacholine causing a 20% fall in FEV1; FENO**,** fractional exhaled nitric oxide;

**\****P* value, asthmavs.controls; \*\**P* value, asthma with high FENO vs.asthma with low FENO; #non-reactive; &Eosinophils as a percentage of total WBCs. Student’s t test was used.