

Appendix

IL-33 analysis

| GINA Grade | Number of Patients | IL-33 Median (pg/ml) | P-value |
|------------|--------------------|----------------------|---------|
| 1 | 31 | 196.6 | 0.937 |
| 2 | 38 | 498.8 | |
| 3 | 61 | 628.5 | |
| 4 | 271 | 751.0 | |
| 5 | 47 | 483.7 | |

Table 1 IL-33 levels (pg/ml) in varying severities of asthma. P-value by Kruskal-Wallis test.

| Smoking Category | Number of Patients | IL-33 Median (pg/ml) (IQR) | P-value |
|------------------|--------------------|----------------------------|---------|
| Current | 182 | 203 (4, 3840) | <0.001 |
| Never | 193 | 1548 (15, 10528) | |
| Ex | 73 | 521 (4, 6727) | |

Table 2 IL-33 levels (pg/ml) in smokers, non-smokers and ex-smokers. P-value by Kruskal-Wallis test.

| | R = | P = |
|------------------------------------|--------|-------|
| FEV1% predicted normal | 0.083 | 0.089 |
| Reversibility by β -agonist | -0.06 | 0.431 |
| Exhaled nitric oxide concentration | 0.064 | 0.250 |
| Asthma control score | 0.083 | 0.355 |
| Serum IgE | -0.104 | 0.074 |
| Blood eosinophil count | -0.110 | 0.076 |
| Body mass index | 0.039 | 0.431 |

Table 3 Relationship between serum IL-33 levels and asthma biomarkers.

IL-18 analysis

| Clinical Category | Number | IL-18 Median (pg/ml) | P-value |
|-------------------|--------|----------------------|---------|
| Asthma | 107 | 107 | 0.008 |
| COPD | 51 | 76 | |
| Healthy | 43 | 233 | |

Table 4a. Sample 1. 201 cases were used. Kruskal-Wallis test on mean concentration (pg/ml)

| Clinical Category | Number | IL-18 Median (pg/ml) | P-value |
|-------------------|--------|----------------------|---------|
| Asthma | 101 | 105 | 0.002 |
| COPD | 47 | 59 | |
| Healthy | 39 | 137 | |

Table 4b. Sample 2. 187 cases were used. Kruskal-Wallis test on mean concentration (pg/ml).

| Smoking Categories | Number | IL-18 Median (pg/ml) | P-value |
|--------------------|--------|----------------------|---------|
| Non-smoker | 75 | 118 | 0.105 |
| Smoker | 91 | 104 | |

Table 5. IL-18 levels (pg/ml) in smokers and non-smokers. Kruskal-Wallis test on mean concentration.

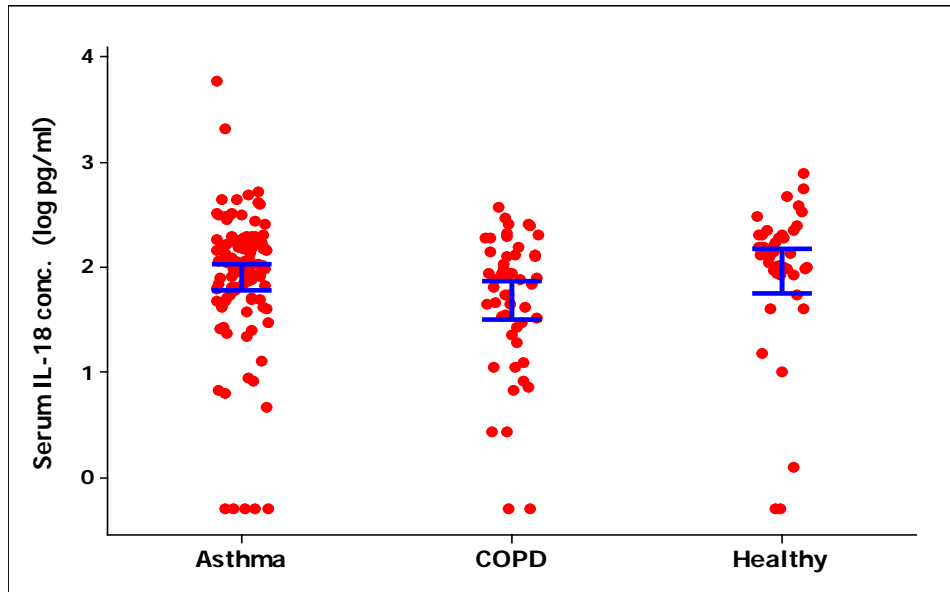


Figure 1. IL-18 levels (pg/ml) in asthmatics, COPD patients and healthy controls.

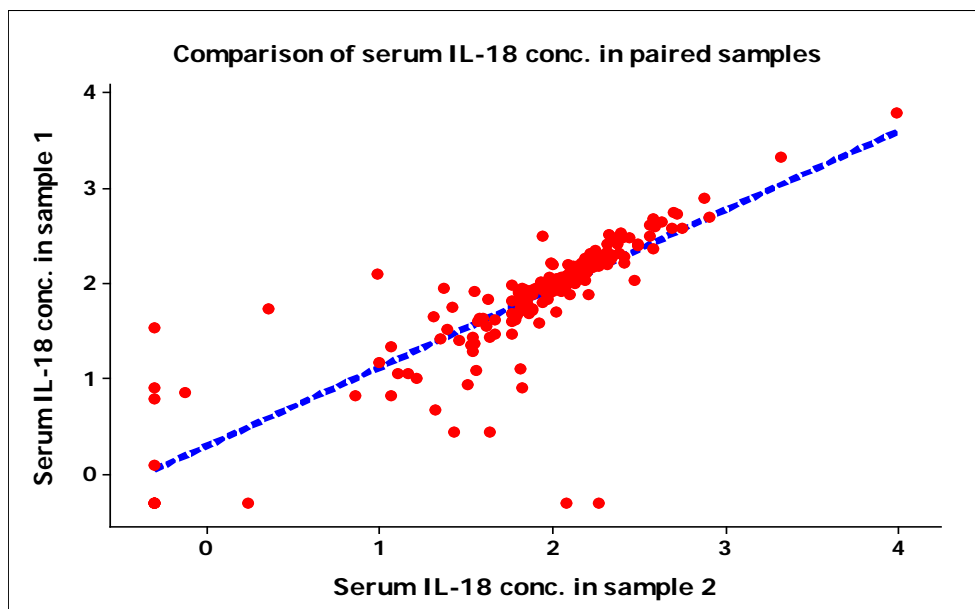


Figure 2. Correlation of IL-18 levels (pg/ml) in 1st and 2nd visits.

Pearson correlation of mean concentration.