## 1.09 Immunoglobulin Deficiency in an Irish Asthma Clinic

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**Background:** The presence of an immunoglobulin deficiency in an asthma patient can increase the burden of the disease, leading to poorer asthma control. (1)

The aim of this study was to determine the frequency of immunoglobulin testing in an Irish adult population attending an asthma clinic and to determine if any correlation between the presence of immunodeficiency and overall asthma control.

**Methods:** This is a retrospective study of one hundred patients attending the Asthma clinic in Cork University Hospital.

Immunoglobulin deficiency (ID) was defined as an IgG, IgA or IgM reading or an IgG subclass result below the internationally accepted range.

Data analysis was performed by way of T-test to ascertain significance, if any, between the ID group and the total population.

**Results:** In the ID group, 9 of 11 (81%) subjects had an ACQ of >1.5 compared with 35 of 53 (66%) in the Non-ID group. The average ACQ in the ID group was 2.93 vs 2.59 in the Non-ID group, however this did not meet statistical significance. Patients in the ID group had a lower average FEV1 at 66.4% compared to the Non-ID group (77.6%) and the No-Data Group (86.6%).

**Conclusion:** Patients with low/deficient immunoglobulin levels have poorer overall asthma control evidenced by higher average ACQ scores and lower average FEV1 compared with the overall population.

**Keywords:** asthma, immunoglobulin deficiency, FEV1, ACQ

**Conflict of Interest:** The authors declare that they have no conflict of interest.

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## References

1) Efficacy of immunoglobulin replacement therapy and azithromycin in severe asthma with antibody deficiency. Allergol. Int. 2020, 69, 215–222