

Airway microbiota in young people across four continents differ by country, asthma status and inflammatory phenotype

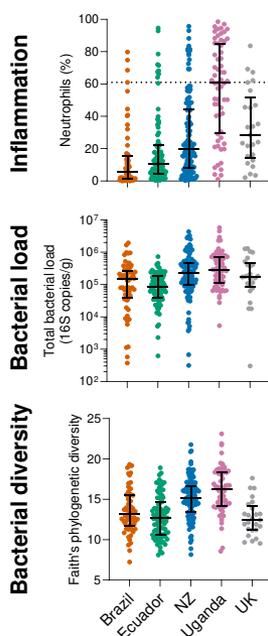
Taylor SL, et al. *Thorax* 2025. DOI: 10.1136/thorax-2025-222965

Study outline

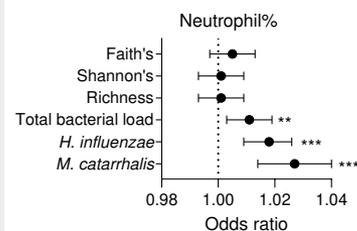
- Heterogeneity in asthma remains poorly characterised, particularly the airway microbiota and inflammatory phenotypes.
- This study, across 5 countries, aimed to identify conserved and geographically distinct relationships between the airway microbiota and inflammation in young people with and without asthma.
- Analyses included centralised microbiota and inflammatory processing and adjustment for age, sex, and centre.

	Asthma		Control	
Brazil	60	8		
Ecuador	89	30		
NZ	129	58		
Uganda	61	8		
UK	25	20		

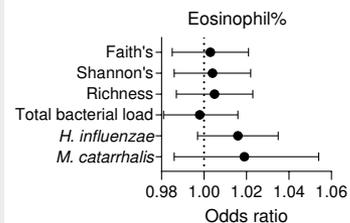
Global heterogeneity



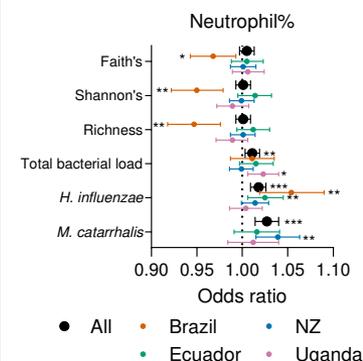
Neutrophil-microbiota association



Eosinophil-microbiota association



Association varies between countries



Conclusions

- Airway inflammation and microbiology varied geographically in young people with asthma.
- A neutrophil-microbiota relationship was conserved.

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