Towards Prevention and Better management of Multimorbidity In **Common Allergic Conditions** Research Collaborative

Impact: This work will identify **unmet need** and **shape interventions** to **prevent** multimorbidity and **improve care** in people with multimorbidity amongst people with common allergic diseases.

Novelty: No previous research **focus on allergic disease**, despite high prevalence. Investigation of a **novel multimorbidity cluster** (skin, respiratory, neurological, and musculoskeletal).

https://a-henderson91.github.io/MICAC

Work packages and partners

Patient and public involvement will be embedded in all work packages.

WP1. CLUSTERS OF MULTIMORBIDITY | WP2. MECHANISMS TOWARDS PREVENTION | WP3. TOWARDS BETTER CARE

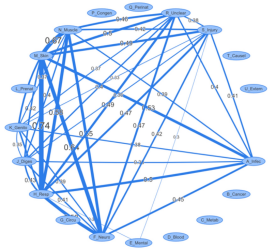
Imperial College London · UCL · London School of Hygiene & Tropical Medicine · Swansea University Prifysgol Abertawe · University of Glasgow · The University of Edinburgh

Data sources

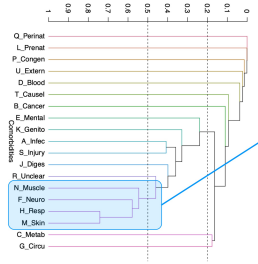
- CPRD — Clinical Practice Research Datalink (CPRD)
- SAIL Databank — Secure Anonymised Information Linkage (SAIL)
- biobank — UK Biobank
- BCS70 1970 British Cohort Study; ncds National Child Development Study — British Birth Cohorts
- Children of the 90s — Avon Longitudinal Study of Children and Parents (ALSPAC)
- GWAS Catalog — Summary-level data from consortia
- ClinicalStudyDataRequest.com; Vivli YODA Project — Clinical trials data
- Interviews and focus groups

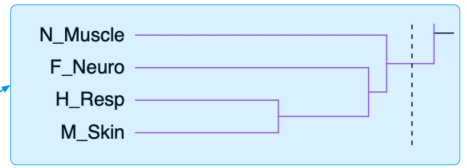
Results from consolidator phase: eczema as an example

Atopic eczema
(age, sex, practice, follow-up adjusted)
P(A*B)|P(A+B) > 0.3

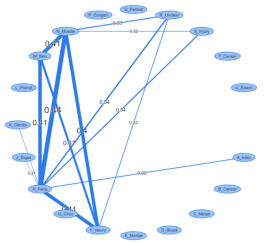


Cluster dendrogram
Atopic eczema





Matched controls
(age, sex, practice, follow-up adjusted)
P(A*B)|P(A+B) > 0.3



Cluster dendrogram
Matched controls