

Applicant

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Project Title

Prediction of short stature and its consequences

Project Summary

Children with idiopathic short stature (ISS) are defined by height below 2 standard deviations of the mean for age and sex without any endocrine, metabolic or other disease explaining the short stature. A score based on genetic data that can reliably predict adult height was recently generated by this project's team. This score was tested in the ALSPAC cohort, which has followed participants from birth to adulthood. Casual interaction between height and cardiometabolic and psychosocial outcomes in the ALSPAC research cohort was also tested. Data from the CLSA will be used to test whether or not these findings replicate in an external cohort of much older age, in the effort to understand if the results observed in the childhood cohort remain consistent in an older adult cohort represented in the CLSA. Further, replication of results increases the probability that they are valid and not due to spurious associations. Older adult health data in CLSA will also be used to understand if height influences these variables not measured in ALSPAC.

Keywords

GWAS, polygenic risk scores, short stature, Mendelian randomization