Exploring results from an association analysis of the UKBiobank data with ischemic stroke

Paul Auer, Andrea Rau, Regina Manansala



This App is intended to provide easy access to summary statistics from a genome-wide association study of the UKBiobank data with ischemic stroke. In our analyses, we included XXXX ischemic stroke cases (as algorithmically defined in Field XXXXX in the UKBiobank) and XXXX stroke free controls that were also free of myocardial infarction. All analyses were conducted in PLINK2 utilizing the dosages from the imputed UKBiobank data.

We ran three different models to adjust for different sets of covariates. All models were run within a logistic regression framework that utilized the Firth penalized likelihood to account for rare variants. Model 1 was adjusted for age, sex, and principal components 1-10 (as computed by the UKBiobank). Model 2 was adjusted for age, sex, and principal components 1-10, BMI, and smoking status. Model 3 was adjusted for age, sex, and principal components 1-10, BMI, smoking status, hypertension, and warfarin status.

Access to the UKBiobank data was granted as part of Project ID 19746, “Development and application of methods for analyzing whole-genome imputed data for hematological traits.”

Please contact Dr. Paul Auer ([pauer@uwm.edu)](mailto:pauer@uwm.edu)) if you have any questions or experience any technical difficulties with the app.