

GWAS summary statistics for blood glucose

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This file contains three association summary statistics for the GWAS and meta-analysis of blood glucose, published in Qiao *et al.* (Nature Communications, 2023).

We conducted genome-wide association studies (GWAS) with ~8 million genetic variants in 367,427 individuals of European ancestry in the full cohort release of the UK Biobank (UKB). We also conducted a meta-analysis of UKB meta-GWAS of random glucose with a published GWAS of fasting glucose from the MAGIC consortium ($N = 151,188$). Full details of genotyping, quality control, and model used in each study are provided in the Methods section of Qiao *et al.* (Nature Communications, 2023).

Here, we provided three summary statistics for glucose traits:

Qiao_et_al_2023_mega-GWAS.txt: GWAS on random glucose with fasting time adjusted as covariates (8,546,067 SNPs);

Qiao_et_al_2023_meta-GWAS.txt: GWAS on random glucose in separate fasting time groups, and then meta-analyse the GWAS summary statistics based on inverse-variance weighted (IVW) method (8,546,067 SNPs);

Qiao_et_al_2023_metaGLU.txt: meta-analysis of UKB meta-GWAS of random glucose with a published GWAS of fasting glucose from the MAGIC consortium (6,094,831 SNPs).

For each SNP, we have provided the following information:

- CHR: Chromosome
- BP: Base-pairs position (build 37)
- SNP: rsID
- A1: minor allele
- A2: major allele
- freq: allele frequency of A1
- b: effect size of A1
- se: standard error of b
- P: p-value
- N: sample size

Reference: Qiao A, *et al.* (2023). Estimation and implications of the genetic architecture of fasting and non-fasting blood glucose. *Nature Communications*. 2023 (accepted).

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