

Random Glucose European, Trans-Ethnic meta-analyses, sex-specific and sex-dimorphic UKBB & Vanderbilt meta-analyses public data release

“GWAS of random glucose in 476,326 individuals provide insights into diabetes pathophysiology, complications and treatment stratification”

Vasiliki Lagou, Longda Jiang, Anna Ulrich *et al.* Nat Genet 2023. Sep;55(9):1448-1461
doi: 10.1038/s41588-023-01462-3. PMID: 37679419

See the publication for description of studies involved in each meta-analysis and the methods applied. Please, note that the summary statistics we provide for the European and Trans-Ethnic meta-analyses were filtered to exclude non-biallelic variants, indels, variants available in less than 50% of the total sample and variants with MAF < 0.01.

For each SNP, we have provided the following information:

European meta-analysis (AS20+AST20 model)

File name: MAGIC_RG_MA_EUR_2019May31.txt

1. variant_id - marker ID
2. effect_allele - effect allele
3. other_allele - non-effect allele
4. EAF - effect allele frequency
5. Effect - overall estimated effect size for the effect_allele
6. StdErr - overall standard error for effect size estimate
7. p_value - meta-analysis p-value
8. HetPVal - P-value for heterogeneity statistic
9. TotalSampleSize - number of samples with marker present
10. CHR - chromosome
11. POS - position (build 37)

Trans-ethnic meta-analysis (AS20+AST20 model)

Filename: MAGIC_RG_MA_transEthnic_2020Oct08.txt

1. variant_id - marker ID
2. effect_allele - effect allele
3. other_allele - non-effect allele
4. EAF - effect allele frequency
5. Effect - overall estimated effect size for the effect_allele
6. StdErr - overall standard error for effect size estimate
7. p_value - meta-analysis p-value
8. HetPVal - P-value for heterogeneity statistic
9. CHR - chromosome
10. POS - position (build 37)

Sex-specific & sex-dimorphic (AST20 model)

Filename: MAGIC_RG_MA_SexSpecific_2020.txt

1. variant_id - marker ID
2. effect_allele - effect allele
3. other_allele - non-effect allele
4. eaf - effect allele frequency
5. beta - overall beta value for meta-analysis
6. se - standard error for beta
7. p_value - meta-analysis p-value
8. male_beta - beta value for meta-analysis in males
9. male_se - standard error for beta in males
10. male_p-value - P-value for meta-analysis in males
11. female_beta - beta value for meta-analysis in females
12. female_se - standard error for beta in females
13. female_p-value - P-value for meta-analysis in females
14. gender_differentiated_p-value - combined P-value of males and females assuming different effect sizes between genders (2 degrees of freedom)
15. gender_heterogeneity_p-value - heterogeneity between genders (1 degree of freedom)

When using data from the downloadable meta-analysis results please acknowledge the source of the data as follows: "Data on glycaemic traits have been contributed by MAGIC investigators and have been downloaded from www.magicinvestigators.org" citing the paper.