

# The Future of Mendelian Randomization Studies: MR Data Challenge December 2021

## Data Dictionary

### MR\_data\_challenge\_p2.csv

This dataset contains data on baseline Marker A levels at baseline and during pregnancy, and offspring outcomes for participants included in the pregnancy substudy.

Variable Name	Description
id	Unique study identifier for each mother-child pair
M_Z3_1	Maternal number of alternate alleles for SNPs on chromosome 3
M_Z3_2	
M_Z4_1	Maternal number of alternate alleles for the SNP on chromosome 4
M_Z9_1	Maternal number of alternate alleles for SNPs on chromosome 9
M_Z9_2	
M_Z9_3	
M_Z9_4	
M_Z9_5	
M_Z17_1	Maternal number of alternate alleles for SNPs on chromosome 17
M_Z17_2	
M_Z17_3	
age	Age at start of pregnancy
A_preg	Marker A levels measured during pregnancy
B	Diagnosed offspring macrosomia
O_Z3_1	Offspring number of alternate alleles for SNPs on chromosome 3
O_Z3_2	
O_Z4_1	Offspring number of alternate alleles for SNPs on chromosome 4
O_Z9_1	Offspring number of alternate alleles for SNPs on chromosome 9
O_Z9_2	
O_Z9_3	
O_Z9_4	
O_Z9_5	
O_Z17_1	Offspring number of alternate alleles for SNPs on chromosome 17
O_Z17_2	
O_Z17_3	
F_Z3_1	Paternal number of alternate alleles for SNPs on chromosome 3
F_Z3_2	
F_Z4_1	Paternal number of alternate alleles for the SNP on chromosome 4
F_Z9_1	Paternal number of alternate alleles for SNPs on chromosome 9
F_Z9_2	
F_Z9_3	
F_Z9_4	
F_Z9_5	

Variable Name	Description
F_Z17_1	Paternal number of alternate alleles for SNPs on chromosome 17
F_Z17_2	
F_Z17_3	

### MR\_data\_challenge\_p3.csv

This dataset contains longitudinal measurements on Marker A levels and diabetes status for the full cohort. *(Note: the data is in long format, in which there is a separate observation for each participant id and follow-up cycle)*

Variable Name	Description
id	Unique study identifier for each participant <i>(Note: the same id is used for participants enrolled in both the full cohort and the pregnancy substudy)</i>
time	Follow-up cycle 0: aged 25 (baseline) 1: aged 30 2: aged 35 3: aged 40 4: aged 45 5: aged 50
M_Z3_1	Number of alternate alleles for SNPs on chromosome 3
M_Z3_2	
M_Z4_1	Number of alternate alleles for the SNP on chromosome 4
M_Z9_1	Number of alternate alleles for SNPs on chromosome 9
M_Z9_2	
M_Z9_3	
M_Z9_4	
M_Z9_5	
M_Z17_1	Number of alternate alleles for SNPs on chromosome 17
M_Z17_2	
M_Z17_3	
A	Marker A levels
Y	Developed diabetes before the start of the next follow-up cycle 0: no 1: yes