

## **Description of Additional Supplementary Files**

File Name: Supplementary Data 1

Description: Baseline population characteristics of participants included in the China Kadoorie Biobank GWAS analyses

File Name: Supplementary Data 2

Description: Blood pressure population characteristics of participants

File Name: Supplementary Data 3

Description: Phenotypic correlations of BP traits in CKB

File Name: Supplementary Data 4

Description: Number of loci associated with blood pressure traits

File Name: Supplementary Data 5

Description: Genome-wide significant associations for BMI-unadjusted SBP

File Name: Supplementary Data 6

Description: Genome-wide significant associations for BMI-adjusted SBP

File Name: Supplementary Data 7

Description: Genome-wide significant associations for BMI-unadjusted DBP

File Name: Supplementary Data 8

Description: Genome-wide significant associations for BMI-adjusted DBP

File Name: Supplementary Data 9

Description: Genome-wide significant associations for BMI-unadjusted PP

File Name: Supplementary Data 10

Description: Genome-wide significant associations for BMI-adjusted PP

File Name: Supplementary Data 11

Description: Genome-wide significant associations for BMI-unadjusted MAP

File Name: Supplementary Data 12

Description: Genome-wide significant associations for BMI-adjusted MAP

File Name: Supplementary Data 13

Description: Results for the 18 additional secondary signals from conditional analysis

File Name: Supplementary Data 14

Description: Replication of novel associations in Biobank Japan and International Consortium of Blood Pressure

File Name: Supplementary Data 15

Description: BP trait heritabilities from meta-analysis of urban and rural regions of CKB

File Name: Supplementary Data 16

Description: Heritability in different strata estimated using REML

File Name: Supplementary Data 17

Description: Genetic correlation of blood pressure between Chinese (CKB) and Japanese (BBJ) populations

File Name: Supplementary Data 18

Description: Cross-ancestry SNP-based heritability and genetic correlation of blood pressure trait in Chinese (CKB) and European (ICBP), and in Japanese (BBJ) and European (ICBP) population

File Name: Supplementary Data 19

Description: Association of GS with BMI-adjusted blood pressure phenotypes in Mendelian randomisation

File Name: Supplementary Data 20

Description: Two-Sample Mendelian randomization between CKB BMI-adjusted blood pressure exposures and BBJ CVD outcomes (IS, ICH, MI) and CKB carotid plaque

File Name: Supplementary Data 21

Description: Association of GS with BMI-adjusted blood pressure phenotypes in multivariable Mendelian randomisation

File Name: Supplementary Data 22

Description: Two-sample multivariable MR between CKB BMI-adjusted blood pressure exposures and BBJ CVD outcomes (IS, ICH, MI) and CKB carotid plaque

File Name: Supplementary Data 23

Description: Estimates of heritability using BOLT-REML

File Name: Supplementary Data 24

Description: Assessment of genomic inflation using LD score regression