**Dataset description for the thesis titled “On the causes and consequences of hypertension”**

Author: CHAN Io Ieong

Department: School of Public Health, Li Ka Shing Faculty of Medicine

E-mail: iichan@hku.hk

There are two files containing the publicly available data, based on GWAS results that are necessary to replicate the findings in this thesis.

**Genetic instruments for systolic and diastolic blood pressure.xlsx**

**Genetic instruments for pubertal timing.xlsx**

All the files include the following columns

|  |  |
| --- | --- |
| SNP | Single nucleotide polymorphism unique ID |
| Chromosome | Chromosome |
| Position | Position in Genome Reference Consortium Human Build 37 |
| Beta | Effect estimate of the effect allele with respect to the non-effect allele |
| SE | Standard error of Beta |
| F-statistic | Instrument strength |
| EA | Effect allele |
| NEA | Non-effect allele |
| EAF | Frequency of the effect allele |
| P-value | P-value for the effect estimate |

Data for the Hong Kong Department of Health Elderly Health Service Cohort used for Chapters 3 and 4 are not publicly available. Sharing, access and re-use of the data are only possible when approved by the principal investigators of the Elderly Health Service Cohort. A detailed description of the data source is available online (<https://pubmed.ncbi.nlm.nih.gov/25480143/>). The World Health Organization mortality data can be retrieved from (<https://www.who.int/data/data-collection-tools/who-mortality-database>).

Replication of the study findings via additional third-party data is detailed in the methodology section for Chapters 5 (Sections 2.3.3 and 2.3.4), 6 (Section 2.3.5), 7 (Section 2.3.6), 8 (Section 2.3.7) and 9 (Section 2.3.8).