

Description of Additional Supplementary Files

Supplementary Data 1

Endpoints defined by ICD10 codes in study.

Supplementary Data 2

Overview of proteins included.

Supplementary Data 3

Data Summary of pQTLs for 42 diseases and healthy population in pQTL-Atlas.

Supplementary Data 4

Summary of independent pQTL associations of conditional analysis.

Supplementary Data 5

Information summary of 23 previously published pGWAS.

Supplementary Data 6

Explained variance for 1,856 proteins with at least one pQTL across 43 disease types.

Supplementary Data 7

Classification of pQTL associations (cis and trans).

Supplementary Data 8

Colocalization (PP.H4) between cis-pQTL and cis-eQTL across 42 diseases.

Supplementary Data 9

Colocalization (PP.H4) between cis-pQTL and cis-sQTL across 42 diseases.

Supplementary Data 10

An overview of the 42 GWAS summary statistics.

Supplementary Data 11

Colocalization results of proteins and GWAS traits.

Supplementary Data 12

Independent pQTLs with a disease interaction.

Supplementary Data 13

Disease-discordant pQTL associations across 27 diseases.

Supplementary Data 14

Mendelian randomization results of proteins with disease risk in healthy population.

Supplementary Data 15

Mendelian randomization results of proteins with disease risk in disease population.

Supplementary Data 16

The high-confidence proteins associated with 21 diseases.

Supplementary Data 17

Associations between risk scores (PRS, ProRS, PRS+ProRS) and incident diseases.

Supplementary Data 18

The C-index of different predictive models for 21 diseases.