

Description of Additional Supplementary Files for:

Genome-wide meta-analysis of iron status biomarkers and the effect of iron on all-cause mortality in HUNT

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Supplementary Data 1: Index variants in genome-wide significant loci from meta-analysis of HUNT, MGI, SardinIA, deCODE, Interval and DBDS

Supplementary Data 2: Descriptive statistics per study

Supplementary Data 3: Protein-altering custom content genotyped variants associated (p -value $< 5E-8$) with iron traits in HUNT

Supplementary Data 4: Novel protein-altering variants in strong LD ($D'=1$ or $R^2 > 0.8$) with meta-analysis index variants

Supplementary Data 5: LD Score regression: Genetic correlation (r_g) \pm standard error and p -values are given for each pair of iron status biomarkers. The matrix is symmetrical around the diagonal.

Supplementary Data 6: Bayesian colocalization analysis of iron trait loci (index variant \pm 500Kb) and cis-eQTLs per tissue from GTEx v8

Supplementary Data 7: DEPICT: Top 10 tissues prioritized for trait associated loci

Supplementary Data 8: DEPICT: Genes prioritized at $FDR < 0.05$

Supplementary Data 9: DEPICT: Top 10 gene sets prioritized per trait

Supplementary Data 10: Polygenic Priority Scores for the 1% top ranked genes for serum iron.

Supplementary Data 11: Polygenic Priority Scores for the 1% top ranked genes for serum ferritin.

Supplementary Data 12: Polygenic Priority Scores for the 1% top ranked genes for total iron binding capacity.

Supplementary Data 13: Polygenic Priority Scores for the 1% top ranked genes for transferrin saturation percentage.

Supplementary Data 14: Single variant PheWAS (phecodes)

Supplementary Data 15: Single variant PheWAS (continuous traits and biomarkers)

Supplementary Data 16: Single variant PheWAS (red blood cell related traits)

Supplementary Data 17: GRS-PheWAS (phecodes)

Supplementary Data 18: GRS-PheWAS (continuous traits and biomarkers)

[Supplementary Data 19: GRS-PheWAS \(red blood cell related traits\)](#)

[Supplementary Data 20: Non-linear Mendelian Randomization: Effect of serum iron on all-cause mortality in HUNT per quantile of the residual iron distribution](#)

[Supplementary Data 21: Non-linear Mendelian Randomization: Effect of serum ferritin on all-cause mortality in HUNT per stratum](#)

[Supplementary Data 22: Non-linear Mendelian Randomization: Effect of Transferrin Saturation Percentage \(TSP\) on all-cause mortality in HUNT per quantile of the TSP residual distribution](#)

[Supplementary Data 23: Non-linear Mendelian Randomization: Effect of total iron binding capacity \(TIBC\) on all-cause mortality per quantile of the residual TIBC distribution](#)