

Description of Additional Supplementary Files

File Name: Supplementary Data 1.

Description: Lung cancer GWAS participant characteristics. Participant details for lung cancer cases and controls in Million Veteran Program (MVP), International Lung Cancer Consortium (ILCCO; McKay et al. 2017), and OncoArray (external replication) cohorts.

File Name: Supplementary Data 2.

Description: Genome-wide significant conditionally independent associations for overall lung cancer in European (EA) meta-analysis.

File Name: Supplementary Data 3.

Description: Genome-wide significant conditionally independent associations for lung adenocarcinoma in European (EA) meta-analysis.

File Name: Supplementary Data 4.

Description: Genome-wide significant conditionally independent associations for squamous cell lung carcinoma in European (EA) meta-analysis.

File Name: Supplementary Data 5.

Description: Fine mapping Million Veteran Program European lung cancer loci.

File Name: Supplementary Data 6.

Description: Fine mapping Million Veteran Program African American (MVP AA) genome-wide significant loci for overall lung cancer.

File Name: Supplementary Data 7.

Description: Genome-wide significant loci for overall lung cancer in multi-ancestry meta-analysis.

File Name: Supplementary Data 8.

Description: Genome-wide significant loci for lung adenocarcinoma in multi-ancestry meta-analysis.

File Name: Supplementary Data 9.

Description: Genome-wide significant loci for squamous cell lung carcinoma in multi-ancestry meta-analysis.

File Name: Supplementary Data 10.

Description: Novel genome-wide significant loci associated with lung cancer risk.

File Name: Supplementary Data 11.

Description: Genetic correlation results for lung cancer and subtypes with cigarette smoking traits.

File Name: Supplementary Data 12.

Description: Heritability results for lung cancer subtypes in European ancestry (EA) meta-analysis.

File Name: Supplementary Data 13.

Description: European meta-analysis overall lung cancer associations conditioned on cigarettes per day. Multi-trait-based conditional and joint analysis (mtCOJO) conditioning GWAS results on cigarettes per day from Liu et al.

File Name: Supplementary Data 14.

Description: European meta-analysis (EA) adenocarcinoma associations conditioned on cigarettes per day.

File Name: Supplementary Data 15.

Description: European meta-analysis (EA) squamous cell carcinoma associations conditioned on cigarettes per day.

File Name: Supplementary Data 16.

Description: Odds ratio (OR) for polygenic risk scores (PRS) of lung cancer, stratified by smoking status.

File Name: Supplementary Data 17.

Description: Replication summary of significant signals, stratified by lung cancer subtype and novelty.

File Name: Supplementary Data 18.

Description: Replication of lung cancer multi-ancestry meta-analysis.

File Name: Supplementary Data 19.

Description: Combined meta-analysis of discovery and replication cohorts for novel loci.

File Name: Supplementary Data 20.

Description: Discovery lung cancer signals in previously published GWAS.

File Name: Supplementary Data 21.

Description: coloc-SuSiE results.

File Name: Supplementary Data 22.

Description: Phenome-wide associations with polygenic risk score of lung cancer.

File Name: Supplementary Data 23.

Description: Phenome-wide associations with polygenic risk score of lung cancer conditioned on cigarettes per day.

File Name: Supplementary Data 24.

Description: Hardy-Weinberg equilibrium exact test results.