Supplementary

Table S1 Diagnostic criteria used by databases about iron status and lung cancer

Phenotype	Consortium	Diagnostic criteria/Method
Iron status	GIS	Serum iron: colorimetric assay, ferrozine measurement. Ferritin: latex particle immunoturbidimetry. Transferrin: immunoturbidimetric, Electro-chemiluminescence immunoassay. Transferrin saturation: Serum iron/ Transferrin×100%
Lung cancer	ILCCO	Histology, immunohistochemistry

GIS, Genetics of Iron Status; ILCCO, International Lung Cancer Consortium.

Table S2 Heterogeneity test for the instrumental variables associated with the four iron status biomarkers and the risk of lung cancer overall and the histological subtypes

Outcome	Iron		Ferritin		Transferrin		Transferrin saturation	
	Q	P value	Q	P value	Q	P value	Q	P value
Lung cancer overall	3.013	0.390	4.814	0.186	18.694	0.009*	2.750	0.432
Adenocarcinoma	5.207	0.157	5.453	0.141	16.055	0.025*	3.605	0.307
Squamous cell carcinoma	0.095	0.992	1.209	0.751	17.530	0.014*	0.768	0.857

*, P<0.05.

https://dx.doi.org/10.21037/jtd-23-1645

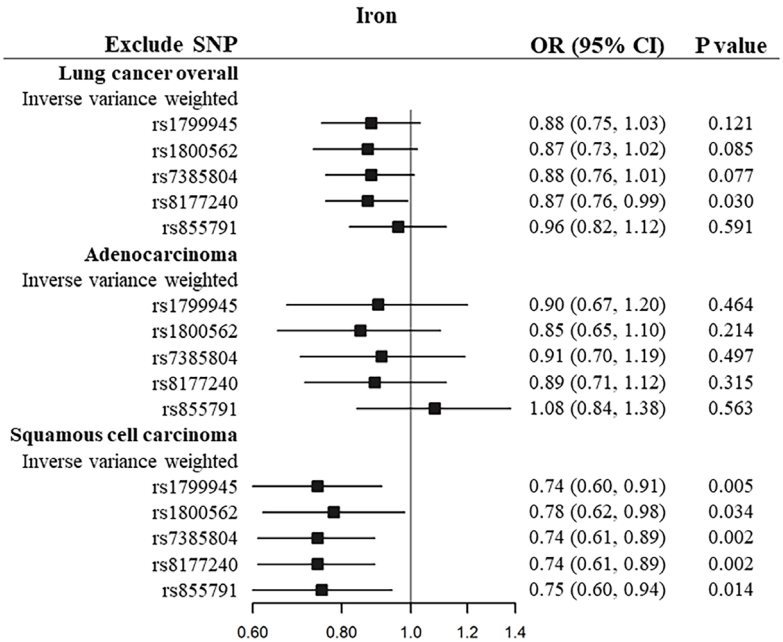

Figure S1 Leave-one-out analysis for the MR estimates for serum iron and the risk of lung cancer. The ORs of lung cancer and their histological subtypes risk per standard deviation increment in the level of serum iron excluding one SNP at per time based on the inverse variance-weighted method. SNP, single nucleotide polymorphism; OR, odds ratio; 95% CI, 95% confidence interval; MR, Mendelian randomization.

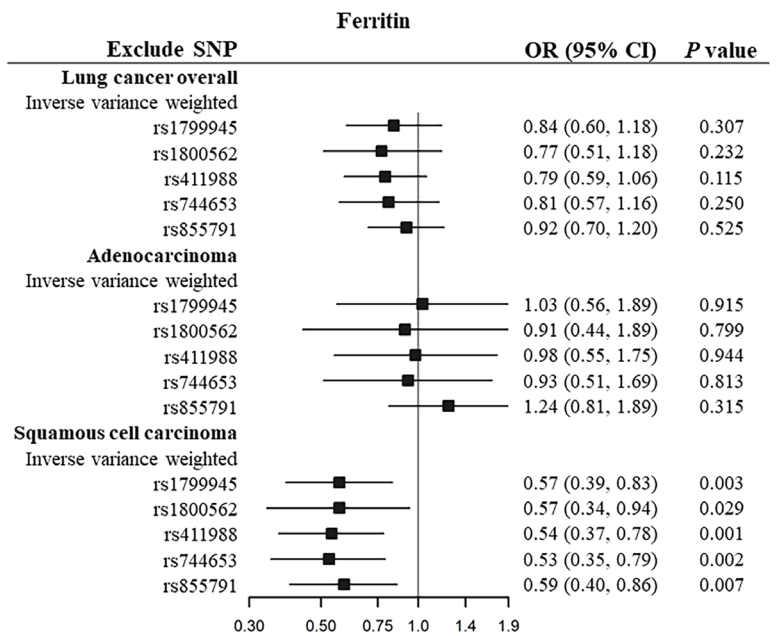

Figure S2 Leave-one-out analysis for the MR for between ferritin and the risk of lung cancer. The OR of lung cancer and their histological subtypes risk per standard deviation increment in the level of ferritin excluding one SNP at per time based on the inverse variance-weighted method. SNP, single nucleotide polymorphism; OR, odds ratio; 95% CI, 95% confidence interval; MR, Mendelian randomization.

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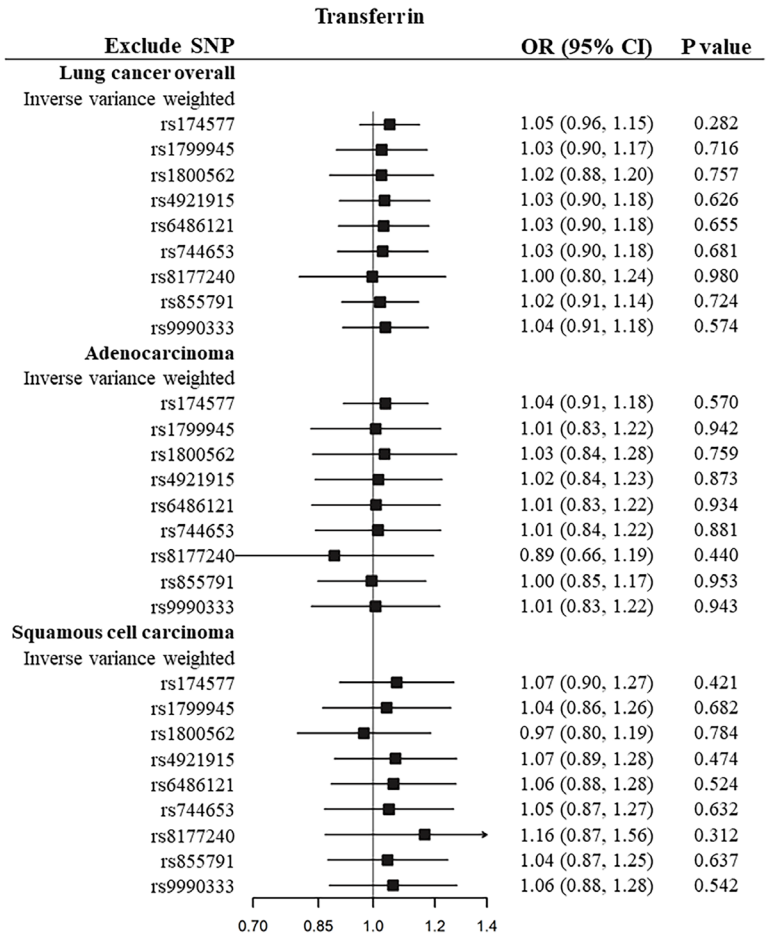

Figure S3 Leave-one-out analysis for the MR estimates for transferrin and the risk of lung cancer. The OR of lung cancer and their histological subtypes risk per standard deviation increment in the level of transferrin excluding one SNP at per time based on the inverse variance-weighted method. SNP, single nucleotide polymorphism; OR, odds ratio; 95% CI, 95% confidence interval; MR, Mendelian randomization.

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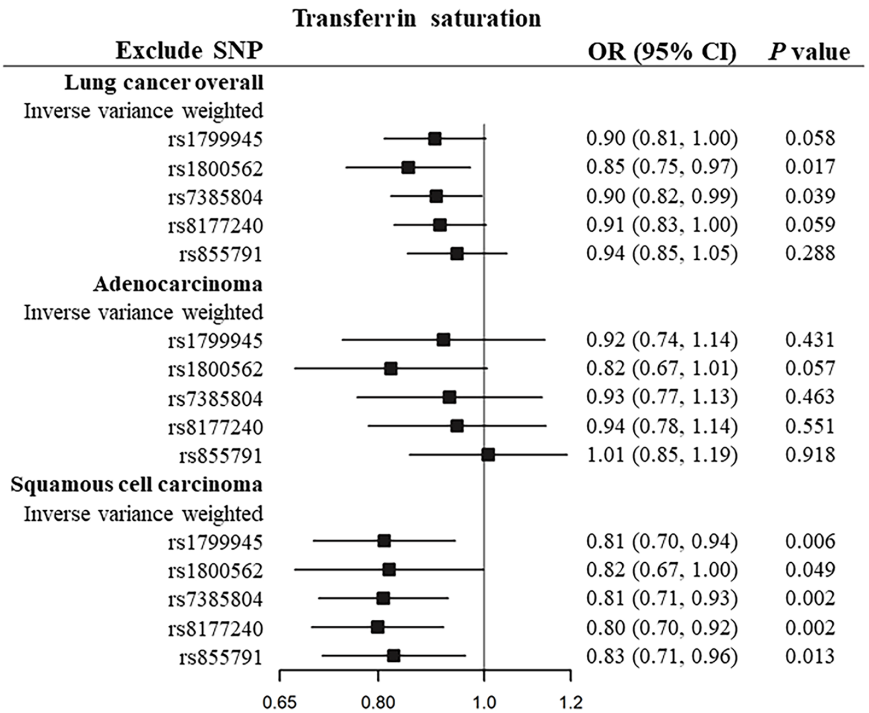

Figure S4 Leave-one-out analysis for the MR estimates for transferrin saturation and the risk of lung cancer. The OR of lung cancer and their histological subtypes risk per standard deviation increment in the level of transferrin saturation excluding one SNP at per time based on the inverse variance-weighted method. SNP, single nucleotide polymorphism; OR, odds ratio; 95% CI, 95% confidence interval; MR, Mendelian randomization.

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