

Association between four indirect indicators of insulin resistance and lung cancer:

Evidence from UK Biobank and Mendelian randomization analysis

Table S1. Characteristics of the study population according to the TG/HDL-C ratio quartiles.

Characteristics	TG/HDL-C ratio					P trend
	Total	Quartile 1 < 1.51	Quartile 2 1.51 - 2.43	Quartile 3 2.43 - 3.97	Quartile 4 ≥ 3.97	
Number	388,013	97,004	97,003	97,003	97,003	
Age, years (mean ± SD)	56.24 ± 8.10	55.01 ± 8.18	56.40 ± 8.09	57.02 ± 7.99	56.54 ± 8.00	<0.001
Male, n (%)	183,139 (47.2)	25,650 (26.4)	39,218 (40.4)	51,167 (52.7)	67,104 (69.2)	<0.001
White ethnicity, n (%)	365,199 (94.1)	90,977 (93.8)	91,312 (94.1)	91,541 (94.4)	91,369 (94.2)	<0.001
Townsend Deprivation Index (mean ± SD)	-1.30 ± 3.09	-1.42 ± 3.02	-1.38 ± 3.05	-1.29 ± 3.09	-1.11 ± 3.18	<0.001
Body mass index, kg/m2 (mean ± SD)	27.45 ± 4.78	24.91 ± 3.85	26.84 ± 4.45	28.35 ± 4.70	29.69 ± 4.71	<0.001
Drinking status, n (%)						<0.001
Never drinking	17,041 (4.4)	3,389 (3.5)	4,197 (4.3)	4,602 (4.7)	4,853 (5.0)	
Previous drinking	13,667 (3.5)	2,448 (2.5)	3,137 (3.2)	3,734 (3.8)	4,348 (4.5)	
Current drinking	357,305 (92.1)	91,169 (94.0)	89,669 (92.4)	88,668 (91.4)	87,799 (90.5)	
Smoking status, n (%)						<0.001
Never smokers	251,246 (64.8)	62,148 (64.1)	62,855 (64.8)	63,173 (65.1)	63,070 (65.0)	
Current or past occasional smokers	108,123 (27.9)	30,098 (31.0)	27,723 (28.6)	26,281 (27.1)	24,021 (24.8)	
Pack years < 10	4,214 (1.1)	965 (1.0)	1,042 (1.1)	1,043 (1.1)	1,164 (1.2)	
Pack years 10–19	18,444 (4.8)	2,629 (2.7)	3,948 (4.1)	4,992 (5.1)	6,875 (7.1)	
Pack years ≥ 20	5,986 (1.5)	1,164 (1.2)	1,435 (1.5)	1,514 (1.6)	1,873 (1.9)	
Healthy physical activity, n (%)	105,438 (27.2)	29,717 (30.6)	27,124 (28.0)	25,439 (26.2)	23,158 (23.9)	<0.001

Healthy diet, n (%)	54,949 (14.2)	16,778 (17.3)	14,551 (15.0)	12,715 (13.1)	10,905 (11.3)	<0.001
Insulin, n (%)	4,629 (1.2)	1,061 (1.1)	871 (0.9)	1,072 (1.1)	1,625 (1.7)	<0.001
Cholesterol-lowering medication, n (%)	69,230 (17.8)	10,076 (10.4)	14,678 (15.1)	19,673 (20.3)	24,803 (25.6)	<0.001
Diabetes, n (%)	17,799 (4.6)	1,946 (2.0)	2,957 (3.0)	4,917 (5.1)	7,979 (8.2)	<0.001
Hypertension, n (%)	97,159 (25.0)	16,081 (16.6)	21,951 (22.6)	27,292 (28.1)	31,835 (32.8)	<0.001
Cardiovascular disease, n (%)	17,274 (4.5)	2,130 (2.2)	3,471 (3.6)	5,050 (5.2)	6,623 (6.8)	<0.001

TG/HDL-C, triglyceride to high-density lipoprotein cholesterol.

Table S2. Characteristics of the study population according to the METS-IR index quartiles.

Characteristics	METS-IR index					P trend
	Total	Quartile 1 < 33.52	Quartile 2 33.52 - 38.98	Quartile 3 38.98 - 45.54	Quartile 4 ≥ 45.54	
Number	388,013	97,004	97,003	97,003	97,003	
Age, years (mean ± SD)	56.24 ± 8.10	55.14 ± 8.13	56.46 ± 8.12	56.86 ± 8.07	56.51 ± 7.98	<0.001
Male, n (%)	183,139 (47.2)	25,248 (26.0)	44,723 (46.1)	55,744 (57.5)	57,424 (59.2)	<0.001
White ethnicity, n (%)	365,199 (94.1)	92,375 (95.2)	91,491 (94.3)	90,636 (93.4)	90,697 (93.5)	<0.001
Townsend Deprivation Index (mean ± SD)	-1.30 ± 3.09	-1.51 ± 2.98	-1.52 ± 2.98	-1.33 ± 3.07	-0.84 ± 3.27	<0.001
Body mass index, kg/m2 (mean ± SD)	27.45 ± 4.78	22.55 ± 1.85	25.68 ± 1.64	28.24 ± 2.00	33.33 ± 4.37	<0.001
Drinking status, n (%)						<0.001
Never drinking	17,041 (4.4)	3,502 (3.6)	3,706 (3.8)	4,299 (4.4)	5,534 (5.7)	
Previous drinking	13,667 (3.5)	2,695 (2.8)	2,843 (2.9)	3,285 (3.4)	4,844 (5.0)	
Current drinking	357,305 (92.1)	90,808 (93.6)	90,455 (93.2)	89,421 (92.2)	86,621 (89.3)	
Smoking status, n (%)						<0.001
Never smokers	251,246 (64.8)	59,408 (61.2)	61,877 (63.8)	63,845 (65.8)	66,116 (68.2)	
Current or past occasional smokers	108,123 (27.9)	30,455 (31.4)	28,433 (29.3)	26,067 (26.9)	23,168 (23.9)	
Pack years < 10	4,214 (1.1)	1,293 (1.3)	1,020 (1.1)	1,019 (1.1)	882 (0.9)	
Pack years 10–19	18,444 (4.8)	4,201 (4.3)	4,177 (4.3)	4,652 (4.8)	5,414 (5.6)	
Pack years ≥ 20	5,986 (1.5)	1,647 (1.7)	1,496 (1.5)	1,420 (1.5)	1,423 (1.5)	
Healthy physical activity, n (%)	105,438 (27.2)	29,989 (30.9)	28,166 (29.0)	25,950 (26.8)	21,333 (22.0)	<0.001

Healthy diet, n (%)	54,949 (14.2)	17,121 (17.7)	14,085 (14.5)	12,391 (12.8)	11,352 (11.7)	<0.001
Insulin, n (%)	4,629 (1.2)	543 (0.6)	696 (0.7)	897 (0.9)	2,493 (2.6)	<0.001
Cholesterol-lowering medication, n (%)	69,230 (17.8)	7,252 (7.5)	13,369 (13.8)	19,738 (20.3)	28,871 (29.8)	<0.001
Diabetes, n (%)	17,799 (4.6)	831 (0.9)	1,775 (1.8)	3,768 (3.9)	11,425 (11.8)	<0.001
Hypertension, n (%)	97,159 (25.0)	12,129 (12.5)	19,368 (20.0)	26,624 (27.4)	39,038 (40.2)	<0.001
Cardiovascular disease, n (%)	17,274 (4.5)	1,489 (1.5)	3,055 (3.1)	4,838 (5.0)	7,892 (8.1)	<0.001

METS-IR, metabolic score for insulin resistance.

Table S3. Characteristics of the study population according to the TyG-BMI index quartiles.

Characteristics	TyG-BMI index					P trend
	Total	Quartile 1 < 204.81	Quartile 2 204.81 – 233.56	Quartile 3 233.56 – 267.65	Quartile 4 ≥267.65	
Number	388,013	97,004	97,003	97,003	97,003	
Age, years (mean ± SD)	56.24 ± 8.10	54.59 ± 8.25	56.56 ± 8.09	57.04 ± 7.98	56.78 ± 7.85	<0.001
Male, n (%)	183,139 (47.2)	30,271 (31.2)	46,636 (48.1)	54,757 (56.4)	51,475 (53.1)	<0.001
White ethnicity, n (%)	365,199 (94.1)	91,664 (94.5)	91,394 (94.2)	90,875 (93.7)	91,266 (94.1)	<0.001
Townsend Deprivation Index (mean ± SD)	-1.30 ± 3.09	-1.45 ± 3.02	-1.53 ± 2.98	-1.36 ± 3.05	-0.87 ± 3.24	<0.001
Body mass index, kg/m2 (mean ± SD)	27.45 ± 4.78	22.45 ± 1.75	25.58 ± 1.39	28.21 ± 1.65	33.56 ± 4.17	<0.001
Drinking status, n (%)						<0.001
Never drinking	17,041 (4.4)	3,833 (4.0)	3,768 (3.9)	4,173 (4.3)	5,267 (5.4)	
Previous drinking	13,667 (3.5)	3,075 (3.2)	2,930 (3.0)	3,202 (3.3)	4,460 (4.6)	
Current drinking	357,305 (92.1)	90,096 (92.9)	90,306 (93.1)	89,631 (92.4)	87,272 (90.0)	
Smoking status, n (%)						<0.001
Never smokers	251,246 (64.8)	59,010 (60.8)	61,719 (63.6)	63,987 (66.0)	66,530 (68.6)	
Current or past occasional smokers	108,123 (27.9)	30,261 (31.2)	28,327 (29.2)	26,092 (26.9)	23,443 (24.2)	
Pack years < 10	4,214 (1.1)	1,319 (1.4)	1,097 (1.1)	955 (1.0)	843 (0.9)	
Pack years 10–19	18,444 (4.8)	4,654 (4.8)	4,354 (4.5)	4,540 (4.7)	4,896 (5.0)	

Pack years ≥ 20	5,986 (1.5)	1,760 (1.8)	1,506 (1.6)	1,429 (1.5)	1,291 (1.3)	
Healthy physical activity, n (%)	105,438 (27.2)	29,685 (30.6)	28,159 (29.0)	26,264 (27.1)	21,330 (22.0)	<0.001
Healthy diet, n (%)	54,949 (14.2)	16,909 (17.4)	14,123 (14.6)	12,386 (12.8)	11,531 (11.9)	<0.001
Insulin, n (%)	4,629 (1.2)	609 (0.6)	727 (0.7)	915 (0.9)	2,378 (2.5)	<0.001
Cholesterol-lowering medication, n (%)	69,230 (17.8)	7,925 (8.2)	14,020 (14.5)	19,571 (20.2)	27,714 (28.6)	<0.001
Diabetes, n (%)	17,799 (4.6)	1,057 (1.1)	2,030 (2.1)	3,827 (3.9)	10,885 (11.2)	<0.001
Hypertension, n (%)	97,159 (25.0)	11,710 (12.1)	19,484 (20.1)	26,812 (27.6)	39,153 (40.4)	<0.001
Cardiovascular disease, n (%)	17,274 (4.5)	1,941 (2.0)	3,463 (3.6)	4,786 (4.9)	7,084 (7.3)	<0.001

TyG-BMI, TyG index with body mass index.

Table S4. Correlations of the four indirect indicators of insulin resistance with participant characteristics.

Characteristics	TyG index		TG/HDL-C		METS-IR		TyG-BMI	
			ratio		index		index	
	<i>r</i>	P-value	<i>r</i>	P-value	<i>r</i>	P-value	<i>r</i>	P-value
Age	0.14	< 0.001	0.02	< 0.001	0.04	< 0.001	0.08	< 0.001
Male	0.22	< 0.001	0.29	< 0.001	0.22	< 0.001	0.13	< 0.001
White ethnicity	0.02	< 0.001	-0.002	0.137	-0.02	< 0.001	-0.01	< 0.001
Townsend Deprivation Index	0.03	< 0.001	0.05	< 0.001	0.10	< 0.001	0.09	< 0.001
Body mass index	0.35	< 0.001	0.31	< 0.001	0.92	< 0.001	0.95	< 0.001
Drinking status	-0.02	< 0.001	-0.02	< 0.001	-0.04	< 0.001	-0.03	< 0.001
Smoking status	0.09	< 0.001	0.08	< 0.001	0.08	< 0.001	0.08	< 0.001
Healthy physical activity	-0.05	< 0.001	-0.05	< 0.001	-0.08	< 0.001	-0.08	< 0.001
Healthy diet	-0.05	< 0.001	-0.06	< 0.001	-0.06	< 0.001	-0.05	< 0.001
Insulin	0.08	< 0.001	0.03	< 0.001	0.09	< 0.001	0.08	< 0.001
Cholesterol-lowering medication	0.16	< 0.001	0.13	< 0.001	0.23	< 0.001	0.21	< 0.001
Diabetes	0.20	< 0.001	0.12	< 0.001	0.24	< 0.001	0.22	< 0.001
Hypertension	0.16	< 0.001	0.12	< 0.001	0.25	< 0.001	0.26	< 0.001
Cardiovascular disease	0.07	< 0.001	0.08	< 0.001	0.13	< 0.001	0.10	< 0.001

Table S5. Prospective associations between four indirect indicators of insulin resistance and the risk of lung adenocarcinoma in the UK Biobank.

Index	Groups	Model1	Model2	Model3
		HR (95%CI)	HR (95%CI)	HR (95%CI)
TyG	Quartile 1	Reference	Reference	Reference
	Quartile 2	1.41(1.19,1.67)	1.15(0.97,1.37)	1.14(0.96,1.35)
	Quartile 3	1.54(1.31,1.82)	1.19(1.01,1.41)	1.16(0.98,1.38)
	Quartile 4	1.58(1.34,1.86)	1.22(1.03,1.44)	1.15(0.97,1.37)
	P trend	< 0.001	0.027	0.162
	Per 1 SD increase in Log TyG values	1.16 (1.10, 1.23)	1.07 (1.01, 1.13)	1.04 (0.98, 1.11)
TG/HDL-C	Quartile 1	Reference	Reference	Reference
	Quartile 2	1.13(0.96,1.34)	1.00(0.85,1.19)	0.97(0.82,1.16)
	Quartile 3	1.36(1.16,1.60)	1.14(0.97,1.35)	1.09(0.92,1.28)
	Quartile 4	1.43(1.22,1.68)	1.25(1.06,1.47)	1.12(0.94,1.33)
	P trend	< 0.001	0.002	0.117
	Per 1 SD increase in Log TG/HDL-C values	1.14 (1.08, 1.20)	1.10 (1.03, 1.16)	1.04 (0.98, 1.11)
METS-IR	Quartile 1	Reference	Reference	Reference

	Quartile 2	0.94(0.80,1.10)	0.82(0.70,0.96)	0.92(0.77,1.10)
	Quartile 3	1.17(1.01,1.37)	0.98(0.84,1.15)	1.16(0.94,1.42)
	Quartile 4	1.01(0.86,1.19)	0.88(0.75,1.03)	1.12(0.84,1.49)
	P trend	0.407	0.444	0.210
	Per 1 SD increase in Log METs-IR values	1.01 (0.96, 1.07)	0.96 (0.91, 1.02)	1.10 (0.96, 1.27)
TyG-BMI	Quartile 1	Reference	Reference	Reference
	Quartile 2	0.99(0.85,1.16)	0.83(0.71,0.97)	0.96(0.80,1.15)
	Quartile 3	1.08(0.93,1.26)	0.87(0.74,1.01)	1.08(0.87,1.33)
	Quartile 4	1.04(0.89,1.22)	0.86(0.74,1.01)	1.22(0.90,1.65)
	P trend	0.479	0.164	0.140
	Per 1 SD increase in Log TyG-BMI values	1.00 (0.95, 1.06)	0.94 (0.88, 0.99)	1.10 (0.92, 1.31)

Table S6. Prospective associations between four indirect indicators of insulin resistance and the risk of lung squamous cell carcinoma in the UK Biobank.

Index	Groups	Model1	Model2	Model3
		HR (95%CI)	HR (95%CI)	HR (95%CI)
TyG	Quartile 1	Reference	Reference	Reference
	Quartile 2	1.61(1.25,2.09)	1.25(0.97,1.62)	1.19(0.92,1.54)
	Quartile 3	1.56(1.20,2.02)	1.09(0.84,1.41)	0.98(0.75,1.27)
	Quartile 4	2.19(1.72,2.80)	1.47(1.15,1.88)	1.20(0.93,1.55)
	P trend	< 0.001	0.005	0.322
	Per 1 SD increase in Log TyG values	1.32(1.22,1.42)	1.16(1.07,1.26)	1.06(0.97,1.16)
TG/HDL-C	Quartile 1	Reference	Reference	Reference
	Quartile 2	1.49(1.14,1.95)	1.21(0.92,1.58)	1.10(0.83,1.44)
	Quartile 3	1.83(1.41,2.38)	1.32(1.02,1.72)	1.10(0.84,1.43)
	Quartile 4	2.47(1.93,3.17)	1.72(1.34,2.23)	1.24(0.95,1.63)
	P trend	< 0.001	< 0.001	0.096
	Per 1 SD increase in Log TG/HDL-C values	1.35(1.25,1.46)	1.21(1.12,1.32)	1.05(0.96,1.15)
METS-IR	Quartile 1	Reference	Reference	Reference

	Quartile 2	0.90(0.70,1.16)	0.69(0.53,0.89)	0.77(0.58,1.01)
	Quartile 3	1.37(1.09,1.73)	0.95(0.75,1.20)	1.01(0.76,1.36)
	Quartile 4	1.52(1.21,1.91)	1.08(0.86,1.36)	1.05(0.71,1.55)
	P trend	< 0.001	0.047	0.391
	Per 1 SD increase in Log METs-IR values	1.21(1.12,1.31)	1.10(1.01,1.20)	1.17(0.96,1.43)
TyG-BMI	Quartile 1	Reference	Reference	Reference
	Quartile 2	1.03(0.81,1.32)	0.77(0.60,0.99)	0.90(0.69,1.17)
	Quartile 3	1.32(1.04,1.66)	0.90(0.71,1.14)	1.06(0.79,1.44)
	Quartile 4	1.42(1.13,1.79)	1.04(0.82,1.30)	1.17(0.77,1.78)
	P trend	<0.001	0.262	0.316
	Per 1 SD increase in Log TyG-BMI values	1.14(1.05,1.23)	1.04(0.95,1.14)	1.11(0.87,1.42)

Table S7. Prospective associations between four indirect indicators of insulin resistance and the risk of small cell lung cancer in the UK Biobank.

Index	Groups	Model1	Model2	Model3
		HR (95%CI)	HR (95%CI)	HR (95%CI)
TyG	Quartile 1	Reference	Reference	Reference
	Quartile 2	1.43(0.98,2.07)	1.17(0.81,1.71)	1.04(0.71,1.51)
	Quartile 3	1.59(1.10,2.29)	1.23(0.85,1.78)	0.99(0.68,1.44)
	Quartile 4	2.29(1.62,3.23)	1.78(1.26,2.52)	1.26(0.88,1.81)
	P trend	< 0.001	< 0.001	0.166
	Per 1 SD increase in Log TyG values	1.34(1.20,1.50)	1.25(1.11,1.41)	1.09(0.96,1.23)
TG/HDL-C	Quartile 1	Reference	Reference	Reference
	Quartile 2	1.66(1.12,2.46)	1.49(1.01,2.21)	1.26(0.84,1.87)
	Quartile 3	1.89(1.29,2.77)	1.62(1.10,2.39)	1.20(0.81,1.78)
	Quartile 4	2.77(1.93,3.98)	2.48(1.70,3.60)	1.52(1.03,2.25)
	P trend	< 0.001	< 0.001	0.038
	Per 1 SD increase in Log TG/HDL-C values	1.39(1.24,1.55)	1.37(1.21,1.55)	1.12(0.99,1.28)
METS-IR	Quartile 1	Reference	Reference	Reference

	Quartile 2	1.29(0.88,1.88)	1.15(0.79,1.68)	1.33(0.89,2.00)
	Quartile 3	1.77(1.24,2.52)	1.52(1.06,2.19)	1.84(1.18,2.86)
	Quartile 4	2.00(1.42,2.83)	1.79(1.25,2.55)	2.30(1.29,4.11)
	P trend	< 0.001	< 0.001	0.004
	Per 1 SD increase in Log METS-IR values	1.22(1.09,1.37)	1.19(1.06,1.34)	1.33(1.00,1.76)
TyG-BMI	Quartile 1	Reference	Reference	Reference
	Quartile 2	1.15(0.80,1.67)	0.97(0.67,1.41)	1.19(0.79,1.77)
	Quartile 3	1.59(1.13,2.24)	1.29(0.91,1.83)	1.71(1.09,2.67)
	Quartile 4	1.77(1.26,2.48)	1.48(1.05,2.08)	2.22(1.20,4.08)
	P trend	< 0.001	0.005	0.006
	Per 1 SD increase in Log TyG-BMI values	1.18(1.06,1.32)	1.13(1.00,1.27)	1.37(0.96,1.94)

Table S8 Tests of proportional hazards assumptions based on scaled Schoenfeld residuals for Cox regression models.

Model	Variable	LC		LUAD		LUSC		SCLC	
		Chi-Square	P-value	Chi-Square	P-value	Chi-Square	P-value	Chi-Square	P-value
Model 1	TyG	1.185	0.757	0.829	0.842	0.161	0.984	4.862	0.182
	GLOBAL	1.185	0.757	0.829	0.842	0.161	0.984	4.862	0.182
Model 2	TyG	1.185	0.757	0.827	0.843	0.161	0.984	4.871	0.182
	Age	6.411	0.011	2.083	0.149	2.268	0.132	0.027	0.869
	Sex	9.985	0.002	0.543	0.461	0.115	0.735	2.460	0.117
	Race	0.549	0.459	0.008	0.930	0.450	0.503	0.186	0.666
	GLOBAL	19.217	0.004	3.417	0.755	2.966	0.813	7.557	0.272
Model 3	TyG	1.099	0.777	0.787	0.853	0.178	0.981	5.009	0.171
	Age	4.883	0.027	2.067	0.151	2.226	0.136	0.029	0.865
	Sex	8.081	0.004	0.560	0.454	0.124	0.725	3.055	0.080
	Body mass index	0.975	0.323	0.000	0.998	2.092	0.148	0.152	0.697
	Race	0.745	0.388	2.199	0.138	0.006	0.939	1.120	0.290
	Healthy diet	0.405	0.524	0.992	0.319	2.137	0.144	0.190	0.663
	Townsend Deprivation Index	1.901	0.168	0.213	0.645	0.236	0.627	0.747	0.387

	Drinking	1.373	0.503	0.721	0.697	2.595	0.273	0.127	0.938
	Smoking	7.928	0.094	6.325	0.176	1.146	0.887	3.464	0.483
	Healthy physical activity	0.009	0.925	0.009	0.925	5.152	0.023	0.163	0.687
	GLOBAL	27.963	0.032	13.486	0.637	16.057	0.449	13.342	0.648
Model 1	TG/HDL-C	1.241	0.743	5.195	0.158	4.322	0.229	0.647	0.886
	GLOBAL	1.241	0.743	5.195	0.158	4.322	0.229	0.647	0.886
Model 2	TG/HDL-C	1.314	0.726	5.222	0.156	4.332	0.228	0.653	0.884
	Age	6.404	0.011	2.082	0.149	2.273	0.132	0.027	0.870
	Sex	10.010	0.002	0.541	0.462	0.114	0.735	2.493	0.114
	Race	0.555	0.456	0.008	0.931	0.449	0.503	0.186	0.666
	GLOBAL	21.312	0.002	7.804	0.253	7.150	0.307	3.370	0.761
Model 3	TG/HDL-C	1.300	0.729	5.265	0.153	4.424	0.219	0.684	0.877
	Age	4.881	0.027	2.066	0.151	2.232	0.135	0.028	0.867
	Sex	8.125	0.004	0.558	0.455	0.122	0.727	3.076	0.079
	Body mass index	0.979	0.323	0.000	0.999	2.093	0.148	0.152	0.696
	Race	0.746	0.388	2.160	0.142	0.006	0.938	1.072	0.300
	Healthy diet	0.407	0.524	0.994	0.319	2.131	0.144	0.190	0.663
	Townsend	1.895	0.169	0.213	0.644	0.236	0.627	0.747	0.387

Deprivation Index									
	Drinking	1.374	0.503	0.721	0.697	2.584	0.275	0.130	0.937
	Smoking	7.894	0.096	6.326	0.176	1.141	0.888	3.449	0.486
	Healthy physical activity	0.009	0.924	0.009	0.925	5.167	0.023	0.161	0.688
	GLOBAL	28.484	0.028	17.986	0.325	20.356	0.205	8.970	0.915
Model 1	METS-IR	5.319	0.150	3.189	0.363	1.192	0.755	4.004	0.261
	GLOBAL	5.319	0.150	3.189	0.363	1.192	0.755	4.004	0.261
Model 2	METS-IR	5.634	0.131	3.210	0.360	1.183	0.757	4.008	0.261
	Age	6.331	0.012	2.078	0.149	2.267	0.132	0.027	0.870
	Sex	9.895	0.002	0.542	0.462	0.114	0.736	2.448	0.118
	Race	0.548	0.459	0.008	0.930	0.451	0.502	0.187	0.665
	GLOBAL	21.873	0.001	5.787	0.448	4.000	0.677	6.680	0.351
Model 3	METS-IR	6.181	0.103	3.221	0.359	1.264	0.738	4.051	0.256
	Age	4.838	0.028	2.064	0.151	2.214	0.137	0.028	0.867
	Sex	8.047	0.005	0.555	0.456	0.120	0.729	2.935	0.087
	Body mass index	0.950	0.330	0.000	0.999	2.082	0.149	0.153	0.696
	Race	0.750	0.387	2.137	0.144	0.006	0.936	1.039	0.308
	Healthy diet	0.407	0.523	0.994	0.319	2.126	0.145	0.191	0.662

	Townsend	1.910	0.167	0.211	0.646	0.230	0.632	0.751	0.386
	Deprivation Index								
	Drinking	1.369	0.504	0.718	0.698	2.616	0.270	0.129	0.938
	Smoking	7.958	0.093	6.330	0.176	1.136	0.888	3.454	0.485
	Healthy physical activity	0.009	0.923	0.008	0.927	5.192	0.023	0.163	0.686
	GLOBAL	31.463	0.012	15.870	0.462	17.084	0.380	12.130	0.735
Model 1	TyG-BMI	2.176	0.537	2.528	0.470	1.957	0.581	5.933	0.115
	GLOBAL	2.176	0.537	2.528	0.470	1.957	0.581	5.933	0.115
Model 2	TyG-BMI	2.393	0.495	2.539	0.468	1.948	0.583	5.944	0.114
	Age	6.334	0.012	2.079	0.149	2.270	0.132	0.027	0.870
	Sex	9.896	0.002	0.545	0.460	0.116	0.734	2.488	0.115
	Race	0.548	0.459	0.008	0.930	0.451	0.502	0.187	0.665
	GLOBAL	19.756	0.003	5.134	0.527	4.773	0.573	8.657	0.194
Model 3	TyG-BMI	2.148	0.542	2.529	0.470	2.073	0.557	6.031	0.110
	Age	4.841	0.028	2.063	0.151	2.218	0.136	0.029	0.865
	Sex	8.021	0.005	0.560	0.454	0.121	0.728	2.995	0.084
	Body mass index	0.932	0.334	0.000	1.000	2.085	0.149	0.152	0.696
	Race	0.750	0.386	2.207	0.137	0.006	0.937	1.135	0.287

Healthy diet	0.407	0.524	0.995	0.319	2.127	0.145	0.190	0.663
Townsend	1.925	0.165	0.213	0.644	0.234	0.628	0.748	0.387
Deprivation Index								
Drinking	1.371	0.504	0.721	0.697	2.602	0.272	0.128	0.938
Smoking	7.991	0.092	6.327	0.176	1.140	0.888	3.461	0.484
Healthy physical activity	0.009	0.924	0.009	0.926	5.179	0.023	0.161	0.688
GLOBAL	27.673	0.035	15.280	0.504	17.956	0.326	14.107	0.591

Table S9. Incremental predictive value of four indirect indicators of insulin resistance for the risk of lung cancer and its subtypes.

Outcomes	Model	C index (95% CI)	P-value
Overall lung cancer	Basic model	0.807 (0.800-0.814)	-
	Basic model + TyG	0.808 (0.801-0.815)	0.028
	Basic model + TG/HDL-C	0.808 (0.801-0.815)	0.042
	Basic model + METS-IR	0.808 (0.801-0.815)	<0.001
	Basic model + TyG-BMI	0.808 (0.801-0.815)	0.019
Lung adenocarcinoma	Basic model	0.772 (0.760-0.785)	-
	Basic model + TyG	0.773 (0.760-0.785)	0.232
	Basic model + TG/HDL-C	0.772 (0.760-0.785)	0.722
	Basic model + METS-IR	0.773 (0.760-0.785)	0.289
	Basic model + TyG-BMI	0.773 (0.760-0.785)	0.266
Lung squamous cell carcinoma	Basic model	0.877 (0.863-0.891)	-
	Basic model + TyG	0.878 (0.864-0.891)	0.159
	Basic model + TG/HDL-C	0.877 (0.864-0.891)	0.388
	Basic model + METS-IR	0.878 (0.864-0.891)	0.047
	Basic model + TyG-BMI	0.878 (0.864-0.891)	0.091
Small cell lung cancer	Basic model	0.879 (0.859-0.899)	-

Basic model + TyG	0.880 (0.860-0.900)	0.188
Basic model + TG/HDL-C	0.879 (0.859-0.899)	0.235
Basic model + METS-IR	0.879 (0.859-0.899)	0.301
Basic model + TyG-BMI	0.879 (0.860-0.899)	0.318

Table S10. SNPs extracted from TyG index or TG/HDL-C ratio GWAS statistical summary data

Exposures	SNP	effect_allele	other_allele	eaf	F	r2	beta	se	pval
TyG	rs114165349	G	C	0.0219	91.6028	3.35E-04	0.0445	0.0047	1.07E-21
TyG	rs72904790	T	C	0.0974	32.4835	1.19E-04	-0.0137	0.0024	1.20E-08
TyG	rs213498	T	A	0.3250	30.0720	1.10E-04	-0.0080	0.0015	4.17E-08
TyG	rs10889332	C	T	0.3052	739.3855	2.70E-03	-0.0389	0.0014	1.34E-162
TyG	rs72669514	C	T	0.0358	33.6731	1.23E-04	0.0186	0.0032	6.53E-09
TyG	rs17656269	C	T	0.3022	35.4245	1.30E-04	0.0087	0.0015	2.65E-09
TyG	rs16836630	G	C	0.0895	47.2888	1.73E-04	-0.0173	0.0025	6.14E-12
TyG	rs1760801	G	A	0.3270	35.0695	1.28E-04	-0.0090	0.0015	3.19E-09
TyG	rs340836	T	C	0.4821	38.7962	1.42E-04	-0.0087	0.0014	4.71E-10
TyG	rs76172548	A	C	0.0189	35.4364	1.30E-04	0.0228	0.0038	2.64E-09
TyG	rs3120619	G	A	0.1799	43.4070	1.59E-04	0.0119	0.0018	4.45E-11
TyG	rs11118610	A	C	0.4672	42.2389	1.54E-04	-0.0090	0.0014	8.09E-11
TyG	rs4846922	C	T	0.3489	229.3587	8.38E-04	0.0222	0.0015	8.63E-52
TyG	rs907866	G	A	0.4274	44.6957	1.63E-04	-0.0093	0.0014	2.31E-11
TyG	rs111585158	C	T	0.1054	32.8340	1.20E-04	0.0121	0.0021	1.00E-08
TyG	rs144470864	A	C	0.0338	31.4500	1.15E-04	0.0173	0.0031	2.05E-08
TyG	rs76384951	A	C	0.0736	137.1080	5.01E-04	-0.0296	0.0025	1.16E-31
TyG	rs533617	T	C	0.0487	179.4809	6.56E-04	-0.0465	0.0035	6.48E-41
TyG	rs35750610	T	C	0.1064	62.2131	2.28E-04	0.0185	0.0023	3.09E-15
TyG	rs34921778	A	G	0.3072	33.7698	1.24E-04	0.0084	0.0014	6.21E-09
TyG	rs12617848	C	T	0.1660	50.6780	1.85E-04	0.0143	0.0020	1.09E-12
TyG	rs80216311	C	T	0.0706	35.1569	1.29E-04	-0.0142	0.0024	3.05E-09

TyG	rs61737373	G	A	0.0686	95.4043	3.49E-04	-0.0286	0.0029	1.57E-22
TyG	rs6547692	A	G	0.4553	733.9307	2.68E-03	0.0375	0.0014	2.05E-161
TyG	rs10206462	T	C	0.3718	39.1882	1.43E-04	-0.0089	0.0014	3.85E-10
TyG	rs6760053	C	G	0.4483	31.9914	1.17E-04	-0.0078	0.0014	1.55E-08
TyG	rs6710938	A	C	0.2038	30.8709	1.13E-04	-0.0090	0.0016	2.76E-08
TyG	rs79953491	A	G	0.1541	126.4479	4.62E-04	-0.0237	0.0021	2.49E-29
TyG	rs115128825	C	A	0.0219	30.4334	1.11E-04	0.0269	0.0049	3.46E-08
TyG	rs484066	T	A	0.3797	125.8799	4.60E-04	-0.0159	0.0014	3.31E-29
TyG	rs17694506	T	C	0.3877	40.2923	1.47E-04	0.0090	0.0014	2.19E-10
TyG	rs2943645	T	C	0.3757	213.5572	7.81E-04	-0.0209	0.0014	2.40E-48
TyG	rs6437249	C	T	0.2833	31.5460	1.15E-04	0.0084	0.0015	1.95E-08
TyG	rs147764624	G	C	0.0129	30.0662	1.10E-04	-0.0302	0.0055	4.18E-08
TyG	rs390802	G	A	0.1640	75.5239	2.76E-04	-0.0153	0.0018	3.63E-18
TyG	rs62271373	T	A	0.0616	69.6384	2.55E-04	0.0254	0.0030	7.15E-17
TyG	rs13074711	T	C	0.1143	30.2189	1.11E-04	0.0120	0.0022	3.86E-08
TyG	rs13108218	G	A	0.3897	118.2590	4.32E-04	0.0156	0.0014	1.54E-27
TyG	rs71603401	A	G	0.1083	37.0581	1.36E-04	0.0125	0.0021	1.15E-09
TyG	rs6448429	C	T	0.1829	45.5497	1.67E-04	0.0127	0.0019	1.49E-11
TyG	rs1471251	A	T	0.3748	136.5246	4.99E-04	0.0164	0.0014	1.56E-31
TyG	rs4134363	G	A	0.2078	31.1676	1.14E-04	-0.0095	0.0017	2.37E-08
TyG	rs3822076	T	A	0.4851	39.3762	1.44E-04	0.0087	0.0014	3.50E-10
TyG	rs2035816	A	G	0.0755	40.9791	1.50E-04	-0.0159	0.0025	1.54E-10
TyG	rs78025076	C	T	0.0189	31.5384	1.15E-04	0.0271	0.0048	1.96E-08
TyG	rs390556	T	C	0.1322	36.2600	1.33E-04	-0.0133	0.0022	1.73E-09
TyG	rs72754154	G	A	0.0537	46.4157	1.70E-04	-0.0214	0.0031	9.58E-12

TyG	rs3936511	A	G	0.1779	153.1189	5.60E-04	0.0216	0.0017	3.69E-35
TyG	rs151913	G	A	0.3926	30.9833	1.13E-04	0.0079	0.0014	2.60E-08
TyG	rs7703744	C	G	0.2594	49.6556	1.82E-04	-0.0109	0.0016	1.84E-12
TyG	rs72801474	G	A	0.0686	38.7273	1.42E-04	-0.0146	0.0024	4.88E-10
TyG	rs12173130	T	C	0.2028	30.1180	1.10E-04	0.0097	0.0018	4.07E-08
TyG	rs11134475	G	A	0.3489	141.7050	5.18E-04	-0.0169	0.0014	1.15E-32
TyG	rs2963476	A	G	0.2157	61.9278	2.26E-04	0.0134	0.0017	3.58E-15
TyG	rs6923241	C	T	0.2724	49.8441	1.82E-04	-0.0109	0.0015	1.67E-12
TyG	rs2745400	G	A	0.5050	36.2273	1.33E-04	0.0083	0.0014	1.76E-09
TyG	rs2894211	C	A	0.1342	63.6864	2.33E-04	0.0175	0.0022	1.46E-15
TyG	rs7758790	T	C	0.2316	75.0902	2.75E-04	0.0143	0.0016	4.52E-18
TyG	rs55697600	A	G	0.0417	94.8730	3.47E-04	0.0351	0.0036	2.05E-22
TyG	rs185139895	G	A	0.0288	37.6150	1.38E-04	0.0208	0.0034	8.63E-10
TyG	rs3025053	G	A	0.0934	40.1166	1.47E-04	-0.0135	0.0021	2.40E-10
TyG	rs4715317	G	T	0.3559	45.8145	1.68E-04	0.0097	0.0014	1.30E-11
TyG	rs1967685	G	C	0.5159	108.3768	3.96E-04	-0.0143	0.0014	2.25E-25
TyG	rs632057	G	T	0.3857	116.9767	4.28E-04	0.0154	0.0014	2.94E-27
TyG	rs12208357	C	T	0.0626	64.9390	2.37E-04	0.0220	0.0027	7.75E-16
TyG	rs77009508	A	G	0.0547	74.5756	2.73E-04	0.0224	0.0026	5.86E-18
TyG	rs55730499	C	T	0.0755	51.1134	1.87E-04	-0.0182	0.0026	8.74E-13
TyG	rs186696265	C	T	0.0129	63.6304	2.33E-04	-0.0473	0.0059	1.51E-15
TyG	rs4709746	C	T	0.1262	30.6386	1.12E-04	-0.0112	0.0020	3.11E-08
TyG	rs852424	C	T	0.3062	33.9891	1.24E-04	0.0085	0.0015	5.55E-09
TyG	rs38205	C	A	0.3976	30.2161	1.11E-04	0.0079	0.0014	3.87E-08
TyG	rs2106727	G	A	0.3817	57.3861	2.10E-04	-0.0108	0.0014	3.59E-14

TyG	rs4722551	T	C	0.1720	97.5812	3.57E-04	-0.0186	0.0019	5.21E-23
TyG	rs1534696	A	C	0.4394	60.8513	2.23E-04	0.0107	0.0014	6.18E-15
TyG	rs2971676	G	A	0.1044	30.9776	1.13E-04	0.0133	0.0024	2.61E-08
TyG	rs878521	G	A	0.2535	188.1242	6.88E-04	0.0218	0.0016	8.43E-43
TyG	rs62459110	G	C	0.0308	34.4763	1.26E-04	-0.0214	0.0036	4.32E-09
TyG	rs799157	C	T	0.0507	143.7769	5.26E-04	0.0408	0.0034	4.05E-33
TyG	rs17145750	C	T	0.1471	911.9525	3.32E-03	-0.0561	0.0019	5.28E-200
TyG	rs10260148	C	T	0.2833	94.1399	3.44E-04	0.0150	0.0015	2.96E-22
TyG	rs73198299	T	C	0.1163	30.3126	1.11E-04	0.0123	0.0022	3.68E-08
TyG	rs7821812	G	C	0.2187	92.6187	3.39E-04	0.0163	0.0017	6.39E-22
TyG	rs904009	A	C	0.2565	96.0064	3.51E-04	0.0159	0.0016	1.16E-22
TyG	rs4921914	T	C	0.2435	137.2653	5.02E-04	0.0194	0.0017	1.07E-31
TyG	rs2975424	T	C	0.1710	36.4950	1.33E-04	0.0106	0.0018	1.53E-09
TyG	rs1388941	G	A	0.3618	96.7306	3.54E-04	0.0144	0.0015	8.01E-23
TyG	rs268	A	G	0.0139	444.6641	1.62E-03	0.1087	0.0052	1.25E-98
TyG	rs117026536	G	T	0.1252	1768.3120	6.43E-03	-0.0952	0.0023	0
TyG	rs57295072	G	C	0.0388	42.1188	1.54E-04	-0.0305	0.0047	8.60E-11
TyG	rs17091881	T	C	0.0268	338.1144	1.24E-03	0.0786	0.0043	1.82E-75
TyG	rs74444445	T	C	0.0189	51.0952	1.87E-04	0.0349	0.0049	8.82E-13
TyG	rs117805502	C	T	0.0308	53.5835	1.96E-04	-0.0322	0.0044	2.48E-13
TyG	rs28550053	A	G	0.1769	94.5406	3.46E-04	-0.0177	0.0018	2.42E-22
TyG	rs75662196	G	C	0.0199	41.3145	1.51E-04	-0.0279	0.0043	1.30E-10
TyG	rs17092008	C	T	0.0646	53.2725	1.95E-04	0.0208	0.0029	2.91E-13
TyG	rs11781356	T	A	0.1561	31.6442	1.16E-04	0.0099	0.0018	1.85E-08
TyG	rs2081687	C	T	0.3648	64.5116	2.36E-04	0.0117	0.0015	9.63E-16

TyG	rs71525127	C	G	0.0596	59.2148	2.17E-04	0.0196	0.0025	1.42E-14
TyG	rs11558471	A	G	0.2913	60.8151	2.22E-04	-0.0115	0.0015	6.29E-15
TyG	rs17321515	A	G	0.4592	1024.6870	3.73E-03	-0.0439	0.0014	2.01E-224
TyG	rs62521590	T	G	0.2505	88.5040	3.24E-04	0.0147	0.0016	5.11E-21
TyG	rs10811661	T	C	0.1680	29.9076	1.09E-04	-0.0099	0.0018	4.53E-08
TyG	rs13289566	C	T	0.2336	50.2341	1.84E-04	-0.0118	0.0017	1.37E-12
TyG	rs2244278	C	A	0.1103	39.9399	1.46E-04	-0.0134	0.0021	2.62E-10
TyG	rs3750571	C	A	0.1203	42.7368	1.56E-04	-0.0124	0.0019	6.27E-11
TyG	rs11006681	G	A	0.1740	35.6363	1.30E-04	-0.0110	0.0018	2.38E-09
TyG	rs142164605	T	A	0.0557	40.7811	1.49E-04	-0.0178	0.0028	1.71E-10
TyG	rs10786069	T	C	0.4523	90.2998	3.30E-04	0.0131	0.0014	2.06E-21
TyG	rs113344423	G	A	0.0726	49.8085	1.82E-04	0.0213	0.0030	1.70E-12
TyG	rs2792736	A	T	0.3111	42.6970	1.56E-04	-0.0101	0.0015	6.40E-11
TyG	rs10832027	A	G	0.2992	68.3594	2.50E-04	-0.0123	0.0015	1.37E-16
TyG	rs3808976	A	G	0.2535	33.3173	1.22E-04	0.0098	0.0017	7.84E-09
TyG	rs99780	C	T	0.3579	198.0633	7.24E-04	0.0202	0.0014	5.73E-45
TyG	rs35169799	C	T	0.0666	76.1722	2.79E-04	0.0247	0.0028	2.61E-18
TyG	rs678614	C	A	0.2942	37.2454	1.36E-04	0.0094	0.0015	1.04E-09
TyG	rs2302883	T	C	0.2346	29.8344	1.09E-04	0.0089	0.0016	4.71E-08
TyG	rs187217942	G	A	0.0219	33.2613	1.22E-04	0.0312	0.0054	8.06E-09
TyG	rs17119701	A	G	0.0427	97.6872	3.57E-04	0.0371	0.0038	4.94E-23
TyG	rs61362984	A	G	0.3748	96.1746	3.52E-04	-0.0139	0.0014	1.06E-22
TyG	rs61904855	C	A	0.0258	32.5695	1.19E-04	0.0234	0.0041	1.15E-08
TyG	rs11216122	G	T	0.0447	34.3573	1.26E-04	-0.0182	0.0031	4.59E-09
TyG	rs7930786	G	C	0.0944	2002.0650	7.27E-03	0.1247	0.0028	0

TyG	rs56225305	G	A	0.0706	1514.2941	5.51E-03	0.1084	0.0028	0
TyG	rs2075294	G	T	0.0229	44.7931	1.64E-04	0.0388	0.0058	2.19E-11
TyG	rs75919952	C	T	0.0557	218.0169	7.97E-04	-0.0468	0.0032	2.56E-49
TyG	rs11600380	T	C	0.0785	209.0178	7.64E-04	-0.0367	0.0025	2.34E-47
TyG	rs5110	C	A	0.0656	55.6722	2.04E-04	-0.0185	0.0025	8.59E-14
TyG	rs12721078	C	A	0.0417	67.2036	2.46E-04	-0.0323	0.0039	2.46E-16
TyG	rs71480323	G	A	0.1004	85.5770	3.13E-04	-0.0196	0.0021	2.24E-20
TyG	rs11216236	C	T	0.0437	49.2903	1.80E-04	0.0240	0.0034	2.21E-12
TyG	rs187929675	C	T	0.0109	160.1576	5.86E-04	-0.0768	0.0061	1.07E-36
TyG	rs11045171	A	G	0.1938	45.0672	1.65E-04	-0.0117	0.0017	1.91E-11
TyG	rs67981690	A	G	0.1421	51.2656	1.88E-04	0.0149	0.0021	8.09E-13
TyG	rs10783828	G	A	0.3280	37.5249	1.37E-04	0.0090	0.0015	9.04E-10
TyG	rs7296326	T	C	0.1402	29.7822	1.09E-04	-0.0119	0.0022	4.84E-08
TyG	rs1585705	A	C	0.3231	34.3361	1.26E-04	0.0088	0.0015	4.64E-09
TyG	rs10861679	T	C	0.3131	38.5491	1.41E-04	0.0094	0.0015	5.35E-10
TyG	rs1882491	T	C	0.3469	83.0513	3.04E-04	-0.0135	0.0015	8.04E-20
TyG	rs1716407	A	G	0.4433	115.9654	4.24E-04	-0.0151	0.0014	4.90E-27
TyG	rs7140110	T	C	0.3151	90.7946	3.32E-04	0.0144	0.0015	1.61E-21
TyG	rs112740904	T	G	0.1412	57.9059	2.12E-04	-0.0149	0.0020	2.76E-14
TyG	rs12885801	C	A	0.2286	31.3922	1.15E-04	0.0091	0.0016	2.11E-08
TyG	rs34820917	G	A	0.0467	30.7314	1.12E-04	-0.0158	0.0029	2.97E-08
TyG	rs35477346	T	C	0.2962	38.5569	1.41E-04	0.0093	0.0015	5.32E-10
TyG	rs139974673	T	C	0.0258	262.4498	9.59E-04	0.0718	0.0044	5.34E-59
TyG	rs72739147	A	T	0.1461	34.6070	1.27E-04	-0.0121	0.0021	4.04E-09
TyG	rs1532085	G	A	0.3648	162.9394	5.96E-04	0.0180	0.0014	2.64E-37

TyG	rs261334	C	G	0.1968	242.8591	8.88E-04	0.0261	0.0017	9.88E-55
TyG	rs11636087	T	C	0.3320	56.8792	2.08E-04	0.0117	0.0015	4.65E-14
TyG	rs8028620	T	C	0.4861	42.6596	1.56E-04	-0.0090	0.0014	6.53E-11
TyG	rs7175132	A	G	0.4135	32.9543	1.21E-04	-0.0081	0.0014	9.44E-09
TyG	rs8025505	C	T	0.2644	37.0825	1.36E-04	0.0096	0.0016	1.13E-09
TyG	rs9935836	A	C	0.1710	31.0704	1.14E-04	0.0099	0.0018	2.49E-08
TyG	rs11075253	C	A	0.2893	88.3052	3.23E-04	-0.0141	0.0015	5.65E-21
TyG	rs12446515	C	T	0.2922	161.7706	5.91E-04	-0.0188	0.0015	4.76E-37
TyG	rs5880	G	C	0.0517	55.0421	2.01E-04	0.0221	0.0030	1.18E-13
TyG	rs12934528	T	C	0.1352	47.6333	1.74E-04	0.0135	0.0020	5.15E-12
TyG	rs2925979	C	T	0.2883	106.1850	3.88E-04	0.0154	0.0015	6.79E-25
TyG	rs11651957	G	A	0.0596	40.3367	1.48E-04	0.0186	0.0029	2.14E-10
TyG	rs12937081	A	G	0.1441	33.1266	1.21E-04	0.0109	0.0019	8.64E-09
TyG	rs72836561	C	T	0.0358	306.0860	1.12E-03	0.0682	0.0039	1.69E-68
TyG	rs231539	C	T	0.1889	48.2515	1.76E-04	0.0131	0.0019	3.76E-12
TyG	rs11657238	G	A	0.3917	32.1704	1.18E-04	-0.0078	0.0014	1.41E-08
TyG	rs1801689	A	C	0.0408	51.6116	1.89E-04	-0.0293	0.0041	6.78E-13
TyG	rs77244849	T	C	0.2922	34.5829	1.26E-04	-0.0088	0.0015	4.09E-09
TyG	rs9891030	G	A	0.2266	38.8694	1.42E-04	0.0099	0.0016	4.54E-10
TyG	rs71352934	A	C	0.0815	35.5401	1.30E-04	-0.0163	0.0027	2.50E-09
TyG	rs8092347	A	G	0.4125	33.1154	1.21E-04	0.0081	0.0014	8.69E-09
TyG	rs197156	A	G	0.3320	40.4837	1.48E-04	-0.0093	0.0015	1.99E-10
TyG	rs1035941	G	A	0.2654	51.6196	1.89E-04	0.0110	0.0015	6.75E-13
TyG	rs4804413	C	T	0.4205	46.8890	1.71E-04	0.0095	0.0014	7.53E-12
TyG	rs116843064	G	A	0.0258	491.4014	1.79E-03	-0.1089	0.0049	8.79E-109

TyG	rs57192995	G	C	0.0656	43.3219	1.58E-04	-0.0199	0.0030	4.65E-11
TyG	rs58542926	C	T	0.0676	407.8327	1.49E-03	-0.0520	0.0026	1.26E-90
TyG	rs188247550	C	T	0.0129	100.8123	3.69E-04	-0.0645	0.0064	1.02E-23
TyG	rs62102718	A	T	0.2793	57.6022	2.11E-04	0.0116	0.0015	3.22E-14
TyG	rs58895965	C	A	0.1620	49.7487	1.82E-04	0.0127	0.0018	1.75E-12
TyG	rs541012177	G	T	0.0348	47.0473	1.72E-04	0.0243	0.0035	6.94E-12
TyG	rs41290102	C	T	0.0199	31.6383	1.16E-04	-0.0331	0.0059	1.86E-08
TyG	rs419925	G	C	0.2863	75.6608	2.77E-04	-0.0130	0.0015	3.39E-18
TyG	rs483082	G	T	0.2187	763.4612	2.79E-03	0.0447	0.0016	8.09E-168
TyG	rs79429216	G	A	0.0139	36.0573	1.32E-04	0.0378	0.0063	1.92E-09
TyG	rs146390218	A	G	0.0219	66.6724	2.44E-04	0.0355	0.0044	3.22E-16
TyG	rs62132802	C	T	0.2932	36.8321	1.35E-04	-0.0091	0.0015	1.29E-09
TyG	rs12610709	G	A	0.1640	58.3116	2.13E-04	0.0140	0.0018	2.24E-14
TyG	rs2207132	G	A	0.0408	53.3301	1.95E-04	0.0283	0.0039	2.83E-13
TyG	rs2250900	C	T	0.2197	30.1034	1.10E-04	0.0090	0.0016	4.10E-08
TyG	rs6073958	T	C	0.2207	252.6855	9.23E-04	0.0274	0.0017	7.14E-57
TyG	rs4812995	T	C	0.2266	31.8863	1.17E-04	0.0091	0.0016	1.64E-08
TyG	rs6066138	G	A	0.2634	31.1717	1.14E-04	-0.0085	0.0015	2.36E-08
TyG	rs6090040	C	A	0.4742	41.2626	1.51E-04	0.0089	0.0014	1.33E-10
TyG	rs2277844	A	G	0.4344	43.0194	1.57E-04	-0.0091	0.0014	5.43E-11
TG/HDL-C	rs10260148	T	C	0.2792	229.6453	5.70E-04	0.0431	0.0028	9.46E-35
TG/HDL-C	rs1030472	G	A	0.2149	116.0392	2.88E-04	0.0336	0.0031	2.31E-18
TG/HDL-C	rs1044531	C	T	0.0886	48.7177	1.21E-04	0.0316	0.0045	1.48E-08
TG/HDL-C	rs1044808	G	C	0.9186	86.2704	2.14E-04	0.0431	0.0046	4.82E-14
TG/HDL-C	rs1045241	C	T	0.7287	108.9909	2.71E-04	0.0300	0.0029	2.43E-17

TG/HDL-C	rs10773049	T	C	0.6048	305.4961	7.59E-04	0.0456	0.0026	1.18E-45
TG/HDL-C	rs11130227	G	A	0.5139	52.2483	1.30E-04	0.0188	0.0026	4.48E-09
TG/HDL-C	rs11648592	A	G	0.0195	62.4306	1.55E-04	0.0739	0.0094	1.44E-10
TG/HDL-C	rs11664369	T	C	0.2671	99.6945	2.48E-04	0.0288	0.0029	5.41E-16
TG/HDL-C	rs11752394	G	C	0.7644	58.8936	1.46E-04	0.0230	0.0030	4.75E-10
TG/HDL-C	rs11766379	C	T	0.2315	76.8715	1.91E-04	0.0266	0.0030	1.12E-12
TG/HDL-C	rs12451511	G	T	0.1952	103.1920	2.56E-04	0.0326	0.0032	1.68E-16
TG/HDL-C	rs12454712	T	C	0.6229	45.1440	1.12E-04	0.0176	0.0026	4.98E-08
TG/HDL-C	rs1260326	T	C	0.3950	1708.9233	4.23E-03	0.1076	0.0026	1.11E-246
TG/HDL-C	rs12686780	T	C	0.1749	60.1368	1.49E-04	0.0260	0.0034	3.12E-10
TG/HDL-C	rs12924608	T	C	0.6091	72.4294	1.80E-04	0.0223	0.0026	5.00E-12
TG/HDL-C	rs12928099	C	A	0.7040	194.7394	4.84E-04	0.0390	0.0028	1.00E-29
TG/HDL-C	rs13107325	T	C	0.0749	210.5558	5.23E-04	0.0703	0.0048	5.30E-32
TG/HDL-C	rs13389219	C	T	0.6074	436.5887	1.08E-03	0.0544	0.0026	1.78E-64
TG/HDL-C	rs1365297	A	G	0.8157	109.3534	2.72E-04	0.0344	0.0033	2.15E-17
TG/HDL-C	rs144033177	C	A	0.0158	59.2475	1.47E-04	0.0804	0.0104	4.22E-10
TG/HDL-C	rs1509195	C	T	0.3074	64.0829	1.59E-04	0.0222	0.0028	8.27E-11
TG/HDL-C	rs1534696	C	A	0.4591	100.6242	2.50E-04	0.0256	0.0026	3.97E-16
TG/HDL-C	rs1538742	A	C	0.5701	116.0222	2.88E-04	0.0278	0.0026	2.33E-18
TG/HDL-C	rs1622638	A	G	0.3944	62.0272	1.54E-04	0.0205	0.0026	1.65E-10
TG/HDL-C	rs17145750	C	T	0.8394	1671.2112	4.14E-03	0.1417	0.0035	2.76E-241
TG/HDL-C	rs1816164	C	T	0.7742	49.5867	1.23E-04	0.0215	0.0030	1.10E-08
TG/HDL-C	rs2067819	G	A	0.7859	125.2981	3.11E-04	0.0347	0.0031	1.06E-19
TG/HDL-C	rs2074493	C	A	0.2260	265.6950	6.60E-04	0.0496	0.0030	6.18E-40
TG/HDL-C	rs2115107	A	G	0.3833	88.9888	2.21E-04	0.0247	0.0026	1.94E-14

TG/HDL-C	rs2227198	A	G	0.4336	58.7367	1.46E-04	0.0197	0.0026	5.01E-10
TG/HDL-C	rs2267373	T	C	0.5808	157.3281	3.91E-04	0.0324	0.0026	2.49E-24
TG/HDL-C	rs2396084	G	A	0.6874	66.6239	1.66E-04	0.0226	0.0028	3.52E-11
TG/HDL-C	rs252913	A	G	0.3495	45.2221	1.12E-04	0.0180	0.0027	4.85E-08
TG/HDL-C	rs2613505	T	C	0.8026	46.5825	1.16E-04	0.0219	0.0032	3.06E-08
TG/HDL-C	rs2723065	A	G	0.6237	108.0895	2.69E-04	0.0273	0.0026	3.28E-17
TG/HDL-C	rs2737226	T	C	0.3924	75.9479	1.89E-04	0.0228	0.0026	1.53E-12
TG/HDL-C	rs275179	A	G	0.8453	47.1747	1.17E-04	0.0247	0.0036	2.50E-08
TG/HDL-C	rs2792751	C	T	0.7255	190.9499	4.74E-04	0.0394	0.0029	3.53E-29
TG/HDL-C	rs2943645	T	C	0.6467	451.5096	1.12E-03	0.0566	0.0027	1.29E-66
TG/HDL-C	rs34345377	G	C	0.1945	54.8111	1.36E-04	0.0238	0.0032	1.89E-09
TG/HDL-C	rs3768321	T	G	0.1967	225.0218	5.59E-04	0.0481	0.0032	4.38E-34
TG/HDL-C	rs3794695	T	C	0.1900	99.0309	2.46E-04	0.0323	0.0032	6.75E-16
TG/HDL-C	rs3934667	G	T	0.6811	98.5724	2.45E-04	0.0279	0.0028	7.87E-16
TG/HDL-C	rs4425336	A	G	0.7848	45.2998	1.13E-04	0.0209	0.0031	4.73E-08
TG/HDL-C	rs4450871	A	G	0.5565	60.6278	1.51E-04	0.0199	0.0026	2.65E-10
TG/HDL-C	rs4519367	A	G	0.4854	47.0766	1.17E-04	0.0175	0.0026	2.59E-08
TG/HDL-C	rs4709746	C	T	0.8659	66.7124	1.66E-04	0.0307	0.0038	3.41E-11
TG/HDL-C	rs4762753	G	T	0.7996	61.1007	1.52E-04	0.0249	0.0032	2.26E-10
TG/HDL-C	rs4800392	C	A	0.4651	65.9997	1.64E-04	0.0208	0.0026	4.34E-11
TG/HDL-C	rs4976033	G	A	0.4016	77.4460	1.92E-04	0.0231	0.0026	9.28E-13
TG/HDL-C	rs55966194	C	G	0.7175	72.7644	1.81E-04	0.0241	0.0028	4.46E-12
TG/HDL-C	rs56271783	C	G	0.0453	210.6371	5.23E-04	0.0898	0.0062	5.16E-32
TG/HDL-C	rs6123685	G	A	0.7454	63.6338	1.58E-04	0.0233	0.0029	9.62E-11
TG/HDL-C	rs61888800	T	G	0.2596	98.8327	2.46E-04	0.0289	0.0029	7.22E-16

TG/HDL-C	rs62102718	T	A	0.2864	113.0564	2.81E-04	0.0300	0.0028	6.26E-18
TG/HDL-C	rs62271373	A	T	0.0599	150.3363	3.73E-04	0.0670	0.0055	2.55E-23
TG/HDL-C	rs632057	T	G	0.3721	266.5574	6.62E-04	0.0430	0.0026	4.64E-40
TG/HDL-C	rs653178	C	T	0.4832	77.8461	1.93E-04	0.0225	0.0025	8.11E-13
TG/HDL-C	rs6572807	G	A	0.2668	45.3778	1.13E-04	0.0194	0.0029	4.60E-08
TG/HDL-C	rs6589112	C	T	0.7056	49.0423	1.22E-04	0.0195	0.0028	1.33E-08
TG/HDL-C	rs664732	C	G	0.0401	54.2383	1.35E-04	0.0480	0.0065	2.29E-09
TG/HDL-C	rs6800707	G	C	0.8104	178.7377	4.44E-04	0.0435	0.0033	2.03E-27
TG/HDL-C	rs684773	C	A	0.7668	207.5450	5.16E-04	0.0433	0.0030	1.44E-31
TG/HDL-C	rs6848050	C	T	0.6976	57.0336	1.42E-04	0.0209	0.0028	8.90E-10
TG/HDL-C	rs7012814	G	A	0.5257	220.3396	5.47E-04	0.0381	0.0026	2.07E-33
TG/HDL-C	rs7015766	C	T	0.9271	2814.1161	6.94E-03	0.2632	0.0050	0
TG/HDL-C	rs7140110	C	T	0.2983	125.1871	3.11E-04	0.0312	0.0028	1.10E-19
TG/HDL-C	rs72647336	A	G	0.0567	339.4578	8.43E-04	0.1094	0.0059	1.56E-50
TG/HDL-C	rs72959041	A	G	0.0493	119.5999	2.97E-04	0.0652	0.0060	7.06E-19
TG/HDL-C	rs7675258	A	G	0.5357	54.9887	1.37E-04	0.0189	0.0026	1.78E-09
TG/HDL-C	rs7786102	G	A	0.2840	104.1328	2.59E-04	0.0288	0.0028	1.23E-16
TG/HDL-C	rs7924036	G	T	0.4964	216.5700	5.38E-04	0.0375	0.0025	7.21E-33
TG/HDL-C	rs79287178	A	G	0.0312	70.8712	1.76E-04	0.0648	0.0077	8.43E-12
TG/HDL-C	rs79634051	G	C	0.9717	51.6662	1.28E-04	0.0552	0.0077	5.46E-09
TG/HDL-C	rs8101064	T	C	0.0328	58.2486	1.45E-04	0.0550	0.0072	5.91E-10
TG/HDL-C	rs838133	A	G	0.4505	93.2150	2.32E-04	0.0255	0.0026	4.72E-15
TG/HDL-C	rs931992	G	T	0.3332	57.1193	1.42E-04	0.0204	0.0027	8.65E-10
TG/HDL-C	rs954244	G	C	0.2546	60.9229	1.51E-04	0.0228	0.0029	2.40E-10
TG/HDL-C	rs9687846	A	G	0.2006	400.8417	9.95E-04	0.0635	0.0032	2.40E-59

TG/HDL-C	rs998584	A	C	0.4827	585.2526	1.45E-03	0.0618	0.0026	8.55E-86
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Table S11. Sensitivity analysis between four indirect indicators of insulin resistance and the risk of lung cancer and its subtypes with participants exclude all missing values at baseline.

Type	LC	LUAD	LUSC	SCLC
	HR (95%CI)	HR (95%CI)	HR (95%CI)	HR (95%CI)
TyG				
Quartile 1	Reference	Reference	Reference	Reference
Quartile 2	1.05 (0.94, 1.16)	1.14(0.96,1.35)	1.17(0.90,1.52)	1.03(0.70,1.51)
Quartile 3	1.09 (0.98, 1.21)	1.17(0.99,1.39)	0.97(0.74,1.26)	1.00(0.69,1.47)
Quartile 4	1.15 (1.03, 1.27)	1.16(0.97,1.38)	1.18(0.91,1.53)	1.27(0.88,1.83)
P trend	0.008	0.145	0.365	0.155
Per 1 SD increase in Log	1.05 (1.01,1.09)	1.04 (0.98, 1.11)	1.06(0.97,1.16)	1.10(0.96,1.25)
TyG values				
TG/HDL-C				
Quartile 1	Reference	Reference	Reference	Reference
Quartile 2	1.06 (0.96, 1.18)	0.98(0.83,1.17)	1.08(0.82,1.42)	1.27(0.85,1.90)
Quartile 3	1.13 (1.01, 1.25)	1.09(0.92,1.29)	1.05(0.80,1.38)	1.22(0.82,1.82)
Quartile 4	1.21 (1.08, 1.34)	1.13(0.94,1.35)	1.25(0.95,1.64)	1.52(1.02,2.26)

P trend	< 0.001	0.101	0.069	0.049
Per 1 SD increase in Log TG/HDL-C values	1.07 (1.03,1.11)	1.05 (0.98, 1.12)	1.06(0.96,1.16)	1.13(0.99,1.28)
METS-IR				
Quartile 1	Reference	Reference	Reference	Reference
Quartile 2	0.95 (0.85, 1.06)	0.92(0.77,1.10)	0.76(0.58,1.01)	1.32(0.88,1.98)
Quartile 3	1.15 (1.02, 1.31)	1.17(0.95,1.44)	1.06(0.79,1.42)	1.80(1.15,2.81)
Quartile 4	1.25 (1.06, 1.48)	1.12(0.84,1.49)	1.12(0.75,1.66)	2.21(1.23,3.97)
P trend	< 0.001	0.215	0.236	0.006
Per 1 SD increase in Log METS-IR values	1.17 (1.07,1.27)	1.11 (0.96, 1.28)	1.19(0.97,1.45)	1.32(0.99,1.76)
TyG-BMI				
Quartile 1	Reference	Reference	Reference	Reference
Quartile 2	0.96 (0.86, 1.07)	0.97(0.81,1.16)	0.90(0.69,1.19)	1.15(0.77,1.73)
Quartile 3	1.08 (0.95, 1.22)	1.10(0.89,1.36)	1.12(0.83,1.53)	1.70(1.09,2.67)
Quartile 4	1.22 (1.02, 1.46)	1.24(0.92,1.69)	1.22(0.80,1.88)	2.15(1.16,3.99)
P trend	0.012	0.110	0.215	0.008
Per 1 SD increase in Log TyG-BMI values	1.09 (0.98, 1.21)	1.11 (0.93, 1.32)	1.12(0.87,1.44)	1.38(0.97,1.97)

Models were fully adjusted with age, sex, ethnicity (White and others), Townsend Deprivation Index, smoking and alcohol status, physical activity, body mass index (BMI), diet.

Table S12. Sensitivity analysis between four indirect indicators of insulin resistance and the risk of lung cancer and its subtypes with participants exclude lung cancer occurred within 2 years.

Type	LC	LUAD	LUSC	SCLC
	HR (95%CI)	HR (95%CI)	HR (95%CI)	HR (95%CI)
TyG				
Quartile 1	Reference	Reference	Reference	Reference
Quartile 2	1.05 (0.94, 1.18)	1.14 (0.95, 1.37)	1.14 (0.87, 1.50)	1.12 (0.75, 1.69)
Quartile 3	1.12 (1.00, 1.25)	1.24 (1.04, 1.49)	0.94 (0.71, 1.24)	0.99 (0.66, 1.49)
Quartile 4	1.14 (1.02, 1.28)	1.17 (0.97, 1.41)	1.09 (0.83, 1.43)	1.28 (0.86, 1.90)
P trend	0.013	0.108	0.806	0.238
Per 1 SD increase in Log	1.05 (1.01, 1.09)	1.05 (0.98, 1.12)	1.03 (0.94, 1.13)	1.10 (0.96, 1.26)
TyG values				
TG/HDL-C				
Quartile 1	Reference	Reference	Reference	Reference
Quartile 2	1.07 (0.96, 1.20)	0.99 (0.83, 1.19)	1.09 (0.82, 1.47)	1.32 (0.86, 2.03)
Quartile 3	1.16 (1.04, 1.30)	1.12 (0.94, 1.34)	1.10 (0.82, 1.46)	1.23 (0.80, 1.89)
Quartile 4	1.21 (1.08, 1.36)	1.12 (0.93, 1.35)	1.21 (0.91, 1.62)	1.56 (1.02, 2.39)

P trend	0.002	0.162	0.183	0.055
Per 1 SD increase in Log TG/HDL-C values	1.07 (1.03, 1.12)	1.05 (0.98, 1.13)	1.04 (0.95, 1.15)	1.14 (0.99, 1.31)
METS-IR				
Quartile 1	Reference	Reference	Reference	Reference
Quartile 2	0.92 (0.82, 1.03)	0.88 (0.73, 1.07)	0.81 (0.61, 1.08)	1.10 (0.71, 1.72)
Quartile 3	1.11 (0.97, 1.26)	1.12 (0.90, 1.39)	0.99 (0.73, 1.36)	1.85 (1.16, 2.94)
Quartile 4	1.21 (1.01, 1.44)	1.04 (0.77, 1.41)	1.12 (0.73, 1.69)	2.27 (1.23, 4.20)
P trend	0.005	0.454	0.325	0.003
Per 1 SD increase in Log METS-IR values	1.16 (1.06, 1.27)	1.10 (0.94, 1.28)	1.14 (0.92, 1.41)	1.37 (1.01, 1.86)
TyG-BMI				
Quartile 1	Reference	Reference	Reference	Reference
Quartile 2	0.95 (0.85, 1.07)	0.95 (0.78, 1.14)	0.94 (0.71, 1.25)	0.97 (0.62, 1.49)
Quartile 3	1.06 (0.93, 1.21)	1.10 (0.88, 1.37)	1.05 (0.76, 1.46)	1.63 (1.02, 2.60)
Quartile 4	1.18 (0.98, 1.43)	1.21 (0.88, 1.67)	1.11 (0.71, 1.75)	2.03 (1.07, 3.87)
P trend	0.039	0.160	0.530	0.010
Per 1 SD increase in Log TyG-BMI values	1.08 (0.97, 1.21)	1.13 (0.94, 1.36)	1.01 (0.78, 1.32)	1.39 (0.95, 2.03)

Models were fully adjusted with age, sex, ethnicity (White and others), Townsend Deprivation Index, smoking and alcohol status, physical activity, body mass index (BMI), diet.

Table S13. Sensitivity analysis between four indirect indicators of insulin resistance and the risk of lung cancer and its subtypes with further adjustment for HbA1c.

Type	LC	LUAD	LUSC	SCLC
	HR (95%CI)	HR (95%CI)	HR (95%CI)	HR (95%CI)
TyG				
Quartile 1	Reference	Reference	Reference	Reference
Quartile 2	1.05 (0.95, 1.17)	1.14 (0.96, 1.35)	1.18 (0.91, 1.53)	1.04 (0.71, 1.51)
Quartile 3	1.08 (0.97, 1.20)	1.16 (0.98, 1.37)	0.97 (0.75, 1.27)	0.99 (0.68, 1.44)
Quartile 4	1.11 (1.00, 1.24)	1.13 (0.95, 1.35)	1.17 (0.90, 1.51)	1.22 (0.85, 1.76)
P trend	0.041	0.252	0.442	0.240
Per 1 SD increase in Log	1.03 (0.99, 1.07)	1.03 (0.97, 1.09)	1.05 (0.96, 1.14)	1.07 (0.94, 1.22)
TyG values				
TG/HDL-C				
Quartile 1	Reference	Reference	Reference	Reference
Quartile 2	1.06 (0.95, 1.18)	0.97 (0.82, 1.15)	1.10 (0.83, 1.44)	1.25 (0.84, 1.87)
Quartile 3	1.13 (1.02, 1.26)	1.08 (0.91, 1.28)	1.09 (0.83, 1.42)	1.19 (0.80, 1.77)
Quartile 4	1.19 (1.07, 1.32)	1.10 (0.93, 1.32)	1.23 (0.94, 1.61)	1.48 (1.00, 2.20)

P trend	< 0.001	0.155	0.121	0.060
Per 1 SD increase in Log TG/HDL-C values	1.06 (1.02, 1.10)	1.04 (0.98, 1.11)	1.05 (0.96, 1.15)	1.11 (0.98, 1.27)
METS-IR				
Quartile 1	Reference	Reference	Reference	Reference
Quartile 2	0.94 (0.84, 1.05)	0.92 (0.77, 1.09)	0.76 (0.58, 1.00)	1.33 (0.89, 1.99)
Quartile 3	1.13 (1.00, 1.28)	1.15 (0.94, 1.41)	1.01 (0.76, 1.35)	1.82 (1.17, 2.82)
Quartile 4	1.21 (1.02, 1.42)	1.09 (0.82, 1.45)	1.02 (0.69, 1.51)	2.18 (1.22, 3.91)
P trend	0.004	0.286	0.473	0.007
Per 1 SD increase in Log METS-IR values	1.13 (1.04, 1.23)	1.08 (0.93, 1.24)	1.13 (0.93, 1.38)	1.30 (0.97, 1.73)
TyG-BMI				
Quartile 1	Reference	Reference	Reference	Reference
Quartile 2	0.95 (0.86, 1.06)	0.96 (0.80, 1.15)	0.90 (0.69, 1.18)	1.18 (0.79, 1.76)
Quartile 3	1.05 (0.93, 1.19)	1.08 (0.87, 1.33)	1.06 (0.79, 1.44)	1.69 (1.08, 2.64)
Quartile 4	1.16 (0.98, 1.39)	1.19 (0.88, 1.61)	1.14 (0.75, 1.74)	2.10 (1.14, 3.88)
P trend	0.045	0.188	0.370	0.010
Per 1 SD increase in Log TyG-BMI values	1.04 (0.94, 1.15)	1.07 (0.90, 1.27)	1.07 (0.84, 1.37)	1.32 (0.92, 1.88)

Models were fully adjusted with age, sex, ethnicity (White and others), Townsend Deprivation Index, smoking and alcohol status, physical activity, body mass index (BMI), diet, HbA1c.

Table S14. Subgroup and interaction analysis between four indirect indicators of insulin resistance (per SD) and lung cancer across various subgroups.

Subgroups	TyG		TG/HDL-C		METS-IR		TyG-BMI	
	HR (95%CI)	P for	HR (95%CI)	P for	HR (95%CI)	P for	HR (95%CI)	P for
		interaction		interaction		interaction		interaction
Age		0.307		0.592		0.008		0.010
<60	1.14(1.07, 1.22)		1.14(1.07, 1.22)		1.25(1.07, 1.47)		1.31(1.09, 1.57)	
>=60	1.03(0.99, 1.08)		1.04(1.00, 1.09)		1.14(1.03, 1.26)		1.09(0.96, 1.23)	
Sex		0.047		0.005		0.380		0.705
Men	1.00(0.96, 1.05)		1.01(0.96, 1.06)		1.04(0.93, 1.16)		0.94(0.82, 1.08)	
Women	1.11(1.04, 1.17)		1.15(1.08, 1.22)		1.36(1.20, 1.55)		1.31(1.12, 1.53)	
Race		0.930		0.884		0.027		0.021
White	1.04 (1.00, 1.08)		1.06 (1.02, 1.10)		1.16(1.07, 1.27)		1.07(0.97, 1.19)	
Other	1.09 (0.91, 1.30)		1.10 (0.90, 1.33)		1.06(0.68, 1.66)		1.08(0.64, 1.81)	
Townsend Deprivation Index		0.001		0.002		<0.001		<0.001
Low deprivation	1.13 (1.04, 1.22)		1.15 (1.06, 1.24)		1.44(1.20, 1.72)		1.41(1.13, 1.75)	
Mid deprivation	1.04 (0.97, 1.12)		1.05 (0.98, 1.13)		1.19(1.01, 1.40)		1.07(0.88, 1.31)	

High deprivation	1.00 (0.95, 1.06)	1.03 (0.98, 1.09)	1.05(0.93, 1.18)	0.94(0.82, 1.09)
Body mass index	0.489	0.468	0.022	0.014
Underweight	1.28 (0.89, 1.85)	1.23 (0.84, 1.79)	2.13(0.92, 4.90)	2.58(1.07, 6.24)
Normal weight	1.00 (0.94, 1.07)	1.02 (0.96, 1.10)	0.96(0.86, 1.07)	0.89(0.79, 1.01)
Overweight	1.07 (1.01, 1.13)	1.10 (1.04, 1.16)	1.15(1.04, 1.28)	1.10(0.97, 1.24)
Obesity	1.02 (0.95, 1.09)	1.03 (0.95, 1.11)	1.02(0.92, 1.13)	0.97(0.87, 1.09)
Drinking	0.641	0.532	0.189	0.170
Yes	1.04 (1.00, 1.08)	1.07 (1.03, 1.11)	1.18(1.08, 1.29)	1.07(0.97, 1.19)
No	1.03 (0.85, 1.24)	0.99 (0.81, 1.21)	1.04(0.68, 1.61)	1.09(0.66, 1.80)
Smoking	0.581	0.009	0.007	0.000
Yes	1.17 (1.11, 1.24)	1.29 (1.22, 1.36)	1.74(1.54, 1.96)	1.37(1.17, 1.59)
No	1.08 (1.03, 1.14)	1.10 (1.04, 1.16)	1.26(1.12, 1.41)	1.23(1.07, 1.42)
Healthy physical activity	0.095	0.497	0.527	0.966
Yes	0.98 (0.91, 1.05)	1.03 (0.96, 1.11)	1.16(0.98, 1.37)	0.88(0.72, 1.08)
No	1.04 (1.00, 1.08)	1.06 (1.02, 1.10)	1.13(1.04, 1.24)	1.05(0.94, 1.17)
Healthy diet	0.346	0.139	0.007	0.008
Yes	1.07 (0.96, 1.19)	1.13 (1.01, 1.26)	1.43(1.13, 1.82)	1.31(0.98, 1.75)
No	1.08(1.04,1.12)	1.15(1.10,1.19)	1.33(1.21,1.45)	1.11(0.99,1.24)
Insulin	0.067	0.009	0.034	0.109

Yes	0.90 (0.73, 1.11)	0.80 (0.60, 1.06)	0.67(0.39, 1.13)	0.75(0.42, 1.36)
No	1.05 (1.01, 1.09)	1.07 (1.03, 1.11)	1.18(1.08, 1.28)	1.09(0.98, 1.21)
Cholesterol-lowering medication	0.761	0.456	0.980	0.691
Yes	1.03 (0.97, 1.09)	1.03 (0.97, 1.10)	1.03(0.90, 1.19)	1.01(0.85, 1.20)
No	1.04 (0.99, 1.09)	1.07 (1.02, 1.12)	1.18(1.06, 1.31)	1.08(0.95, 1.23)
Diabetes	0.801	0.301	0.184	0.391
Yes	1.02 (0.92, 1.14)	1.03 (0.91, 1.17)	1.03(0.80, 1.33)	1.11(0.82, 1.49)
No	1.03 (0.99, 1.07)	1.06 (1.02, 1.11)	1.14(1.04, 1.25)	1.03(0.92, 1.15)
Hypertension	0.604	0.991	0.597	0.802
Yes	1.06 (0.99, 1.12)	1.06 (1.00, 1.13)	1.08(0.94, 1.24)	1.08(0.92, 1.28)
No	1.03 (0.98, 1.07)	1.06 (1.01, 1.11)	1.19(1.07, 1.32)	1.05(0.92, 1.19)
Cardiovascular disease	0.892	0.774	0.915	0.749
Yes	1.06 (0.96, 1.17)	1.05 (0.95, 1.17)	1.02(0.81, 1.29)	1.09(0.83, 1.45)
No	1.04 (1.00, 1.08)	1.06 (1.02, 1.10)	1.15(1.05, 1.26)	1.07(0.96, 1.20)

Models were fully adjusted with age, sex, ethnicity (White and others), Townsend Deprivation Index, smoking and alcohol status, physical activity, body mass index (BMI), diet.

Table S15. Subgroup and interaction analysis between four indirect indicators of insulin resistance (per SD) and lung adenocarcinoma across various subgroups.

Subgroups	TyG		TG/HDL-C		METS-IR		TyG-BMI	
	HR (95%CI)	P for	HR (95%CI)	P for	HR (95%CI)	P for	HR (95%CI)	P for
		interaction		interaction		interaction		interaction
Age		0.184		0.330		0.566		0.680
<60	1.18 (1.06, 1.31)		1.17 (1.05, 1.31)		1.34 (1.03, 1.73)		1.54 (1.14, 2.08)	
>=60	1.02 (0.94, 1.10)		1.00 (0.93, 1.08)		1.03 (0.87, 1.22)		1.05 (0.85, 1.30)	
Sex		0.460		0.078		0.538		0.831
Men	1.01 (0.93, 1.10)		0.99 (0.90, 1.08)		0.97 (0.79, 1.18)		0.99 (0.77, 1.25)	
Women	1.09 (0.99, 1.19)		1.13 (1.03, 1.24)		1.29 (1.05, 1.59)		1.29 (1.00, 1.66)	
Race		0.554		0.522		0.147		0.129
White	1.03 (0.97, 1.10)		1.04 (0.97, 1.10)		1.10 (0.95, 1.27)		1.08 (0.91, 1.29)	
Other	1.16 (0.89, 1.49)		1.15 (0.87, 1.52)		1.08 (0.57, 2.08)		1.26 (0.59, 2.67)	
Townsend Deprivation Index		0.513		0.759		0.011		0.007
Low deprivation	1.01 (0.89, 1.14)		1.01 (0.89, 1.14)		1.14 (0.85, 1.52)		1.04 (0.73, 1.48)	
Mid deprivation	1.05 (0.93, 1.17)		1.02 (0.91, 1.15)		1.00 (0.76, 1.30)		1.08 (0.78, 1.49)	

High deprivation	1.05 (0.96, 1.15)	1.08 (0.98, 1.18)	1.15 (0.94, 1.42)	1.12 (0.87, 1.44)
Body mass index	0.660	0.778	0.346	0.333
Underweight	0.72 (0.35, 1.46)	0.72 (0.35, 1.50)	0.65 (0.16, 2.67)	0.67 (0.16, 2.75)
Normal weight	1.01 (0.90, 1.12)	1.02 (0.91, 1.14)	0.99 (0.82, 1.19)	0.95 (0.78, 1.15)
Overweight	1.07 (0.98, 1.18)	1.07 (0.98, 1.18)	1.15 (0.96, 1.38)	1.16 (0.95, 1.41)
Obesity	1.01 (0.89, 1.15)	1.01 (0.88, 1.16)	0.93 (0.76, 1.13)	0.93 (0.76, 1.14)
Drinking	0.124	0.096	0.331	0.230
Yes	1.05 (0.98, 1.12)	1.06 (0.99, 1.13)	1.11 (0.96, 1.29)	1.12 (0.94, 1.33)
No	0.81 (0.59, 1.13)	0.75 (0.53, 1.06)	0.82 (0.39, 1.73)	0.70 (0.30, 1.65)
Smoking	0.127	0.049	0.186	0.046
Yes	1.21 (1.10, 1.33)	1.27 (1.16, 1.40)	1.64 (1.31, 2.04)	1.52 (1.15, 2.00)
No	1.03 (0.96, 1.12)	1.05 (0.96, 1.14)	1.14 (0.94, 1.37)	1.14 (0.91, 1.43)
Healthy physical activity	0.362	0.860	0.533	0.245
Yes	1.02 (0.90, 1.15)	1.08 (0.95, 1.22)	1.28 (0.96, 1.70)	1.03 (0.73, 1.45)
No	1.05 (0.97, 1.12)	1.03 (0.96, 1.11)	1.05 (0.89, 1.23)	1.13 (0.92, 1.38)
Healthy diet	0.930	0.421	0.086	0.187
Yes	1.01 (0.86, 1.19)	1.10 (0.93, 1.31)	1.42 (0.97, 2.09)	1.10 (0.70, 1.74)
No	1.04 (0.98, 1.12)	1.04 (0.97, 1.11)	1.06 (0.91, 1.24)	1.10 (0.91, 1.33)
Insulin	0.133	0.081	0.146	0.191

Yes	0.84 (0.60, 1.18)	0.72 (0.44, 1.16)	0.55 (0.22, 1.36)	0.62 (0.23, 1.67)
No	1.05 (0.98, 1.11)	1.05 (0.99, 1.12)	1.12 (0.97, 1.29)	1.12 (0.94, 1.33)
Cholesterol-lowering medication	0.967	0.957	0.651	0.512
Yes	1.02 (0.91, 1.13)	1.01 (0.90, 1.13)	0.92 (0.71, 1.19)	1.00 (0.74, 1.36)
No	1.05 (0.97, 1.13)	1.06 (0.98, 1.14)	1.18 (0.99, 1.40)	1.15 (0.93, 1.41)
Diabetes	0.683	0.628	0.113	0.101
Yes	1.03 (0.86, 1.23)	1.05 (0.84, 1.31)	1.13 (0.71, 1.79)	1.16 (0.69, 1.96)
No	1.03 (0.97, 1.10)	1.04 (0.97, 1.11)	1.07 (0.92, 1.24)	1.05 (0.88, 1.27)
Hypertension	0.342	0.382	0.122	0.176
Yes	1.00 (0.90, 1.11)	1.00 (0.89, 1.11)	0.90 (0.71, 1.15)	0.94 (0.70, 1.27)
No	1.06 (0.98, 1.14)	1.06 (0.99, 1.15)	1.20 (1.01, 1.44)	1.17 (0.94, 1.45)
Cardiovascular disease	0.050	0.021	0.425	
Yes	0.85 (0.70, 1.03)	0.79 (0.64, 0.98)	0.59 (0.38, 0.92)	0.66 (0.39, 1.13)
No	1.06 (1.00, 1.13)	1.07 (1.00, 1.14)	1.17 (1.00, 1.36)	1.17 (0.97, 1.40)

Models were fully adjusted with age, sex, ethnicity (White and others), Townsend Deprivation Index, smoking and alcohol status, physical activity, body mass index (BMI), diet.

Table S16. Subgroup and interaction analysis between four indirect indicators of insulin resistance (per SD) and lung squamous cell carcinoma across various subgroups.

Subgroups	TyG		TG/HDL-C		METS-IR		TyG-BMI	
	HR (95%CI)	P for	HR (95%CI)	P for	HR (95%CI)	P for	HR (95%CI)	P for
		interaction		interaction		interaction		interaction
Age		0.967		0.637		0.576		0.476
<60	1.04 (0.88, 1.22)		1.02 (0.86, 1.22)		0.96 (0.65, 1.41)		0.94 (0.60, 1.47)	
>=60	1.08 (0.97, 1.19)		1.05 (0.95, 1.17)		1.24 (0.99, 1.57)		1.22 (0.91, 1.63)	
Sex		0.189		0.032		0.697		0.976
Men	1.01 (0.91, 1.13)		0.98 (0.88, 1.09)		1.03 (0.80, 1.31)		0.96 (0.71, 1.30)	
Women	1.15 (0.99, 1.35)		1.22 (1.04, 1.43)		1.51 (1.06, 2.15)		1.39 (0.90, 2.15)	
Race		0.592		0.547		0.770		0.943
White	1.07 (0.98, 1.17)		1.06 (0.97, 1.16)		1.19 (0.97, 1.46)		1.13 (0.88, 1.45)	
Other	0.94 (0.57, 1.57)		0.91 (0.52, 1.58)		0.66 (0.19, 2.28)		0.70 (0.17, 2.90)	
Townsend Deprivation Index		0.373		0.241		0.155		0.346
Low deprivation	1.11 (0.89, 1.38)		1.09 (0.87, 1.36)		1.34 (0.81, 2.22)		1.19 (0.64, 2.20)	
Mid deprivation	1.08 (0.90, 1.30)		1.08 (0.89, 1.30)		1.36 (0.89, 2.06)		1.21 (0.72, 2.03)	

High deprivation	1.04 (0.93, 1.16)	1.03 (0.92, 1.16)	1.06 (0.82, 1.37)	1.02 (0.75, 1.40)
Body mass index	0.337	0.285	0.062	0.013
Underweight	4.01 (1.02, 15.80)	4.80 (0.97, 23.82)	23.87(1.21,472.13)	207.14(2.97,14436.05)
Normal weight	0.97 (0.82, 1.14)	0.96 (0.82, 1.14)	0.82 (0.62, 1.08)	0.71 (0.53, 0.95)
Overweight	1.12 (0.98, 1.28)	1.13 (0.98, 1.29)	1.17 (0.90, 1.51)	1.13 (0.84, 1.52)
Obesity	1.03 (0.88, 1.21)	0.98 (0.83, 1.17)	1.01 (0.79, 1.29)	1.00 (0.78, 1.29)
Drinking	0.881	0.411	0.217	0.367
Yes	1.06 (0.97, 1.16)	1.07 (0.97, 1.17)	1.22 (1.00, 1.49)	1.10 (0.86, 1.42)
No	1.10 (0.67, 1.78)	0.87 (0.52, 1.47)	0.73 (0.24, 2.17)	1.31 (0.35, 4.90)
Smoking	0.244	0.910	0.026	0.003
Yes	1.15 (1.02, 1.30)	1.26 (1.11, 1.42)	1.75 (1.32, 2.30)	1.29 (0.91, 1.83)
No	1.18 (1.04, 1.34)	1.14 (1.00, 1.30)	1.38 (1.02, 1.85)	1.48 (1.04, 2.13)
Healthy physical activity	0.137	0.027	0.003	0.006
Yes	0.98 (0.83, 1.16)	1.02 (0.86, 1.20)	1.20 (0.82, 1.76)	0.93 (0.57, 1.50)
No	1.10 (0.99, 1.22)	1.07 (0.96, 1.19)	1.16 (0.92, 1.47)	1.19 (0.89, 1.58)
Healthy diet	0.113	0.035	0.001	0.002
Yes	1.17 (0.89, 1.53)	1.30 (0.97, 1.74)	1.86 (1.01, 3.45)	1.54 (0.74, 3.23)
No	1.05 (0.96, 1.16)	1.03 (0.94, 1.13)	1.11 (0.90, 1.38)	1.08 (0.84, 1.41)

Insulin	0.122	0.058	0.032	0.086
Yes	0.80 (0.48, 1.35)	0.68 (0.33, 1.42)	0.34 (0.09, 1.34)	0.55 (0.12, 2.45)
No	1.08 (0.98, 1.18)	1.06 (0.97, 1.17)	1.21 (0.99, 1.48)	1.14 (0.89, 1.47)
Cholesterol-lowering medication	0.678	0.409	0.096	0.265
Yes	1.12 (0.98, 1.28)	1.06 (0.92, 1.22)	1.09 (0.79, 1.49)	1.21 (0.82, 1.77)
No	1.00 (0.89, 1.12)	1.03 (0.92, 1.15)	1.11 (0.86, 1.44)	0.97 (0.70, 1.33)
Diabetes	0.923	0.614	0.377	0.676
Yes	1.05 (0.84, 1.31)	1.02 (0.78, 1.34)	0.86 (0.49, 1.50)	1.07 (0.56, 2.03)
No	1.04 (0.95, 1.15)	1.05 (0.95, 1.15)	1.16 (0.94, 1.45)	1.06 (0.81, 1.38)
Hypertension	0.759	0.669	0.794	0.574
Yes	1.09 (0.94, 1.25)	1.04 (0.89, 1.20)	1.14 (0.82, 1.57)	1.22 (0.83, 1.82)
No	1.04 (0.93, 1.16)	1.06 (0.95, 1.19)	1.17 (0.91, 1.51)	1.03 (0.75, 1.41)
Cardiovascular disease	0.072	0.529	0.584	0.988
Yes	1.34 (1.10, 1.64)	1.27 (1.02, 1.59)	1.60 (0.99, 2.58)	2.12 (1.19, 3.79)
No	1.00 (0.91, 1.11)	1.00 (0.91, 1.11)	1.03 (0.82, 1.28)	0.95 (0.73, 1.25)

Models were fully adjusted with age, sex, ethnicity (White and others), Townsend Deprivation Index, smoking and alcohol status, physical activity, body mass index (BMI), diet.

Table S17. Subgroup and interaction analysis between four indirect indicators of insulin resistance (per SD) and small cell lung cancer across various subgroups.

Subgroups	TyG		TG/HDL-C		METS-IR		TyG-BMI	
	HR (95%CI)	P for	HR (95%CI)	P for	HR (95%CI)	P for	HR (95%CI)	P for
		interaction		interaction		interaction		interaction
Age		0.518		0.679		0.640		0.711
<60	1.21 (0.98, 1.49)		1.22 (0.98, 1.52)		1.60 (0.97, 2.62)		1.97 (1.10, 3.54)	
>=60	1.06 (0.91, 1.24)		1.08 (0.92, 1.27)		1.20 (0.85, 1.71)		1.23 (0.79, 1.91)	
Sex		0.023		0.074		0.080		0.054
Men	0.99 (0.83, 1.17)		1.07 (0.90, 1.27)		1.17 (0.79, 1.74)		0.97 (0.59, 1.58)	
Women	1.24 (1.02, 1.49)		1.20 (0.99, 1.46)		1.55 (1.02, 2.36)		2.08 (1.24, 3.49)	
Race		0.403		0.545		0.819		0.747
White	1.08 (0.95, 1.23)		1.12 (0.98, 1.28)		1.32 (0.99, 1.76)		1.33 (0.94, 1.90)	
Other	1.27 (0.58, 2.75)		1.13 (0.49, 2.60)		1.15 (0.45, 2.93)		2.56 (0.94, 6.98)	
Townsend Deprivation Index		0.008		0.001		0.001		0.005
Low deprivation	1.37 (1.03, 1.81)		1.52 (1.14, 2.03)		2.73 (1.44, 5.15)		2.93 (1.32, 6.50)	
Mid deprivation	1.13 (0.88, 1.45)		1.14 (0.88, 1.47)		1.46 (0.83, 2.56)		1.55 (0.77, 3.10)	

High deprivation	0.97 (0.82, 1.16)	0.99 (0.83, 1.19)	0.98 (0.66, 1.44)	0.96 (0.60, 1.55)
Body mass index	0.075	0.024	0.016	0.080
Underweight	4.04 (1.16, 14.07)	4.72 (0.98, 22.70)	14.33(0.55,375.98)	9.72(0.28,334.73)
Normal weight	1.05 (0.82, 1.35)	1.10 (0.87, 1.40)	1.15 (0.77, 1.70)	1.15 (0.74, 1.79)
Overweight	1.20 (0.99, 1.46)	1.24 (1.02, 1.51)	1.40 (0.97, 2.04)	1.35 (0.88, 2.06)
Obesity	0.90 (0.71, 1.13)	0.90 (0.70, 1.15)	0.77 (0.54, 1.10)	0.73 (0.50, 1.07)
Drinking	0.539	0.681	0.808	0.853
Yes	1.10 (0.97, 1.25)	1.14 (1.00, 1.30)	1.38 (1.03, 1.83)	1.39 (0.98, 1.99)
No	0.67 (0.31, 1.48)	0.68 (0.28, 1.64)	0.41 (0.21, 0.77)	0.54 (0.29, 1.02)
Smoking	0.836	0.536	0.291	0.045
Yes	1.29 (0.91, 1.83)	1.27 (1.08, 1.50)	1.45 (1.23, 1.71)	2.54 (1.76, 3.66)
No	1.16 (0.95, 1.42)	1.17 (0.95, 1.44)	1.26 (0.79, 1.99)	1.72 (0.99, 3.02)
Healthy physical activity	0.514	0.255	0.007	0.013
Yes	1.05 (0.82, 1.35)	1.12 (0.86, 1.45)	1.29 (0.72, 2.28)	1.08 (0.53, 2.20)
No	1.10 (0.95, 1.27)	1.13 (0.97, 1.31)	1.34 (0.97, 1.87)	1.47 (0.98, 2.21)
Healthy diet	0.216	0.804	0.776	0.589
Yes	0.88 (0.60, 1.29)	1.04 (0.69, 1.55)	1.04 (0.43, 2.55)	0.86 (0.30, 2.46)
No	1.12 (0.98, 1.28)	1.14 (0.99, 1.30)	1.36 (1.01, 1.84)	1.45 (1.00, 2.10)

Insulin	0.817	0.999	0.397	0.477
Yes	0.84 (0.36, 1.96)	1.09 (0.41, 2.92)	2.49 (0.88, 7.08)	0.93 (0.38, 2.25)
No	1.10 (0.96, 1.25)	1.13 (0.99, 1.28)	1.33 (0.99, 1.77)	1.39 (0.98, 1.99)
Cholesterol-lowering medication	0.415	0.106	0.161	0.299
Yes	1.04 (0.84, 1.29)	0.99 (0.79, 1.24)	0.94 (0.58, 1.54)	1.09 (0.60, 1.98)
No	1.10 (0.94, 1.29)	1.18 (1.01, 1.38)	1.50 (1.06, 2.14)	1.46 (0.95, 2.26)
Diabetes	0.371	0.188	0.165	0.197
Yes	0.96 (0.66, 1.39)	0.94 (0.61, 1.46)	1.05 (0.42, 2.64)	1.06 (0.37, 3.07)
No	1.09 (0.95, 1.25)	1.14 (0.99, 1.30)	1.32 (0.97, 1.79)	1.35 (0.93, 1.97)
Hypertension	0.400	0.082	0.148	0.525
Yes	1.03 (0.83, 1.27)	0.97 (0.78, 1.22)	0.78 (0.49, 1.26)	1.08 (0.61, 1.94)
No	1.12 (0.95, 1.31)	1.21 (1.03, 1.42)	1.76 (1.23, 2.51)	1.54 (0.99, 2.41)
Cardiovascular disease	0.414	0.642	0.999	0.835
Yes	0.97 (0.67, 1.40)	1.03 (0.69, 1.53)	1.06 (0.45, 2.49)	0.85 (0.31, 2.34)
No	1.11 (0.97, 1.26)	1.13 (0.99, 1.30)	1.34 (0.99, 1.82)	1.46 (1.00, 2.12)

Models were fully adjusted with age, sex, ethnicity (White and others), Townsend Deprivation Index, smoking and alcohol status, physical activity, body mass index (BMI), diet.

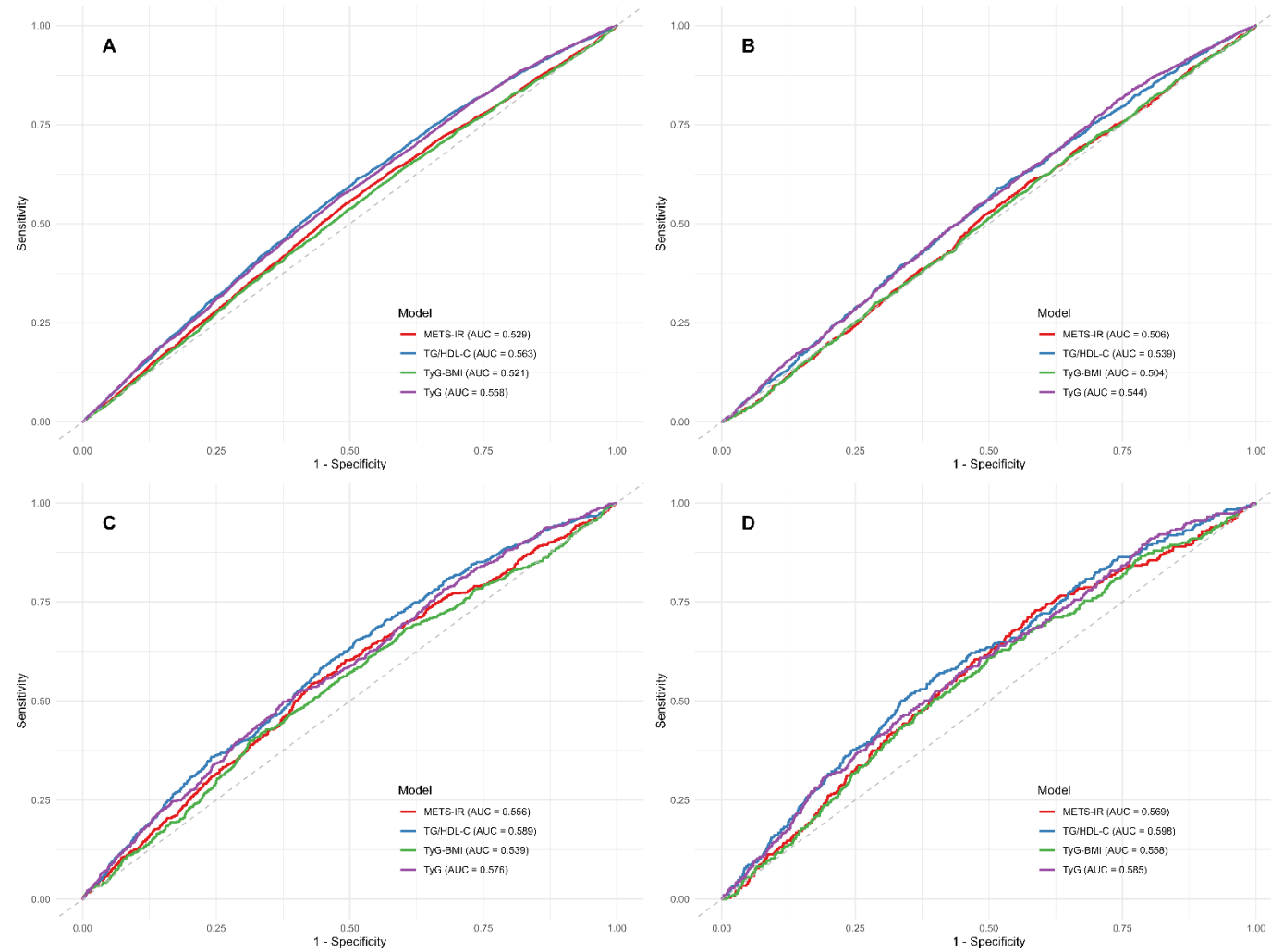


Figure S1. The discriminatory power of four indirect indicators of insulin resistance for the development of lung cancer. A. LC; B. LUAD; C. LUSC; D. SCLC.

LC, lung cancer; LUAD, lung adenocarcinoma; LUSC, lung squamous cell carcinoma; SCLC, small cell lung cancer

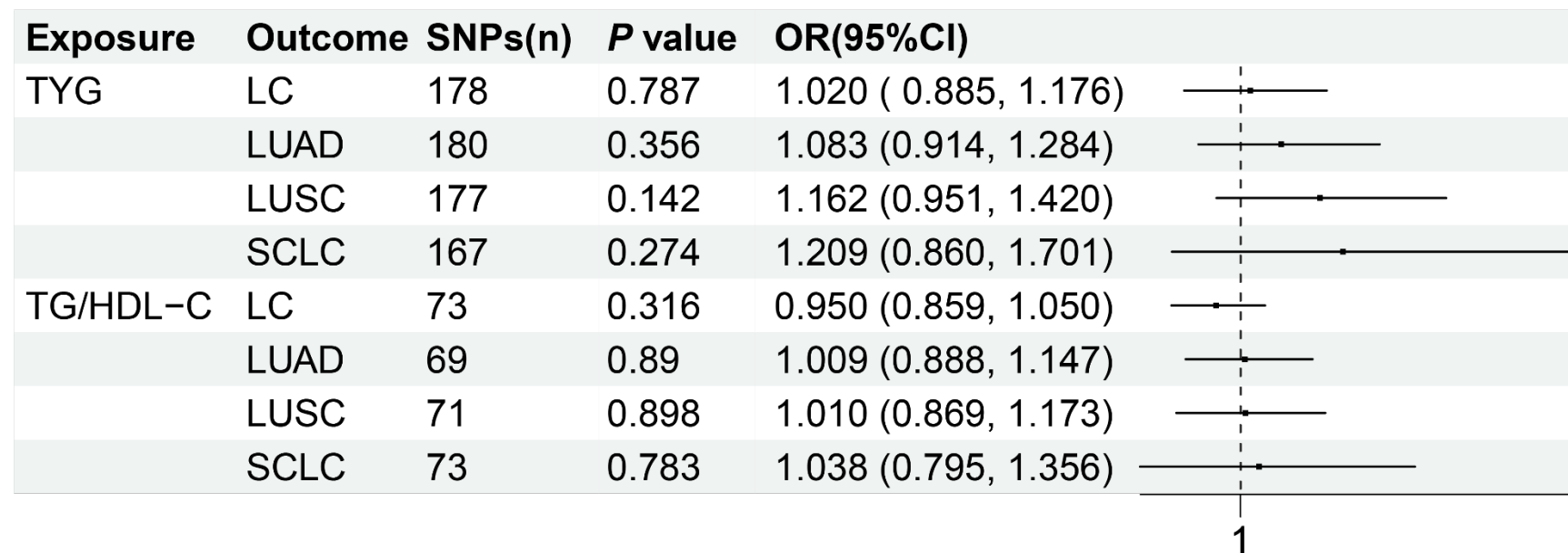


Figure S2. Forest plot of MR effect of the causal relationship between indirect indicators of insulin resistance and the risk of lung cancer and its subtypes (IVW Method).

MR, Mendelian Randomization; SNP, Single Nucleotide Polymorphism; OR, Odds Ratio; 95%CI, 95% Confidence Interval; IVW, Inverse Variance Weighted. LC, lung cancer; LUAD, lung adenocarcinoma; LUSC, lung squamous cell carcinoma; SCLC, small cell lung cancer

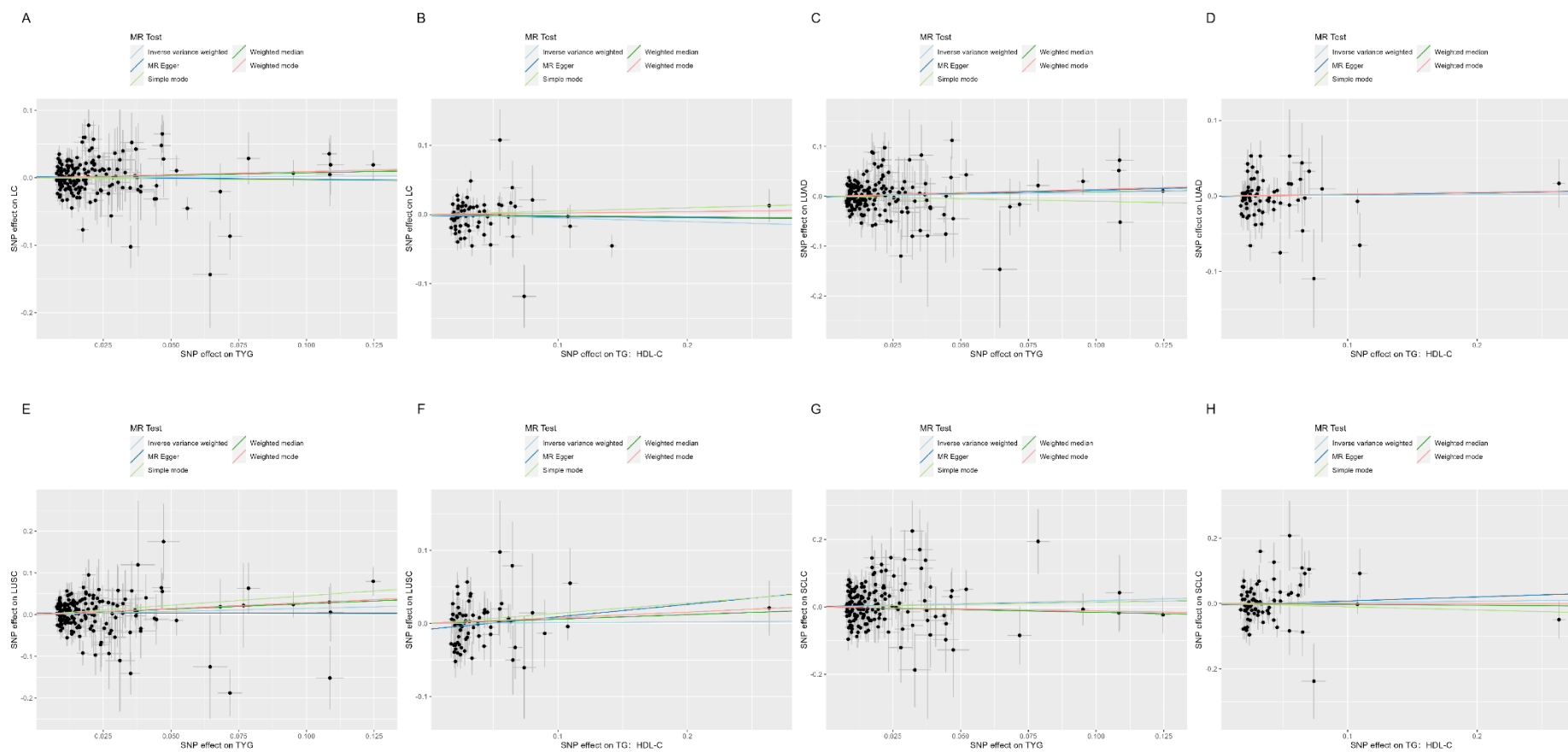


Figure S3. Scatter plot of genetic associations between indirect indicators of insulin resistance and the risk of lung cancer and its subtypes. (A, B) LC; (C, D) LUAD; (E, F) LUSC; (G, H) SCLC.

SNP, Single Nucleotide Polymorphism; LC, lung cancer; LUAD, lung adenocarcinoma; LUSC, lung squamous cell carcinoma; SCLC, small cell lung cancer

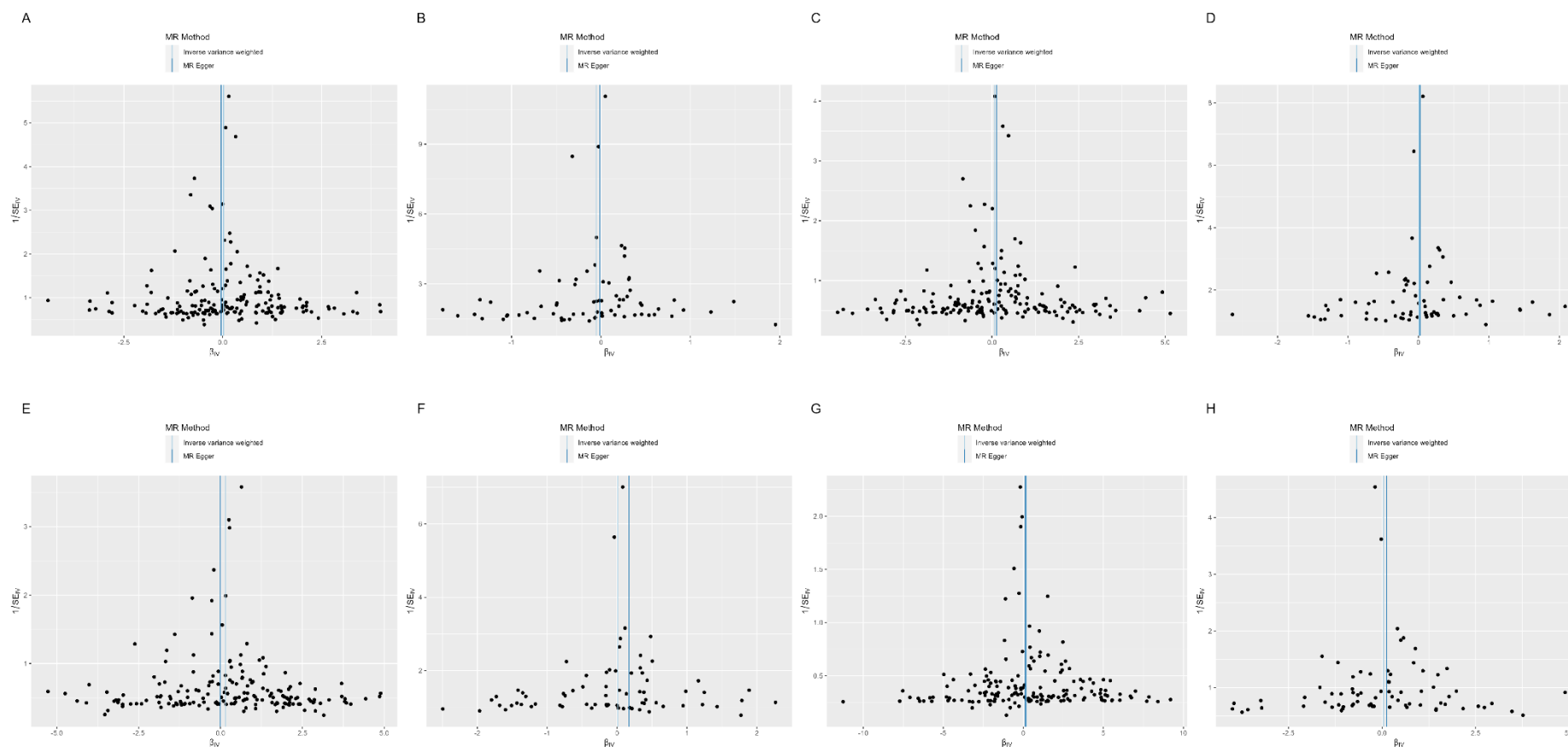


Figure S4. Funnel plot of the relationship between the causal effect of indirect indicators of insulin resistance and the risk of lung cancer and its subtypes. (A, B) LC; (C, D) LUAD; (E, F) LUSC; (G, H) SCLC.

LC, lung cancer; LUAD, lung adenocarcinoma; LUSC, lung squamous cell carcinoma; SCLC, small cell lung cancer

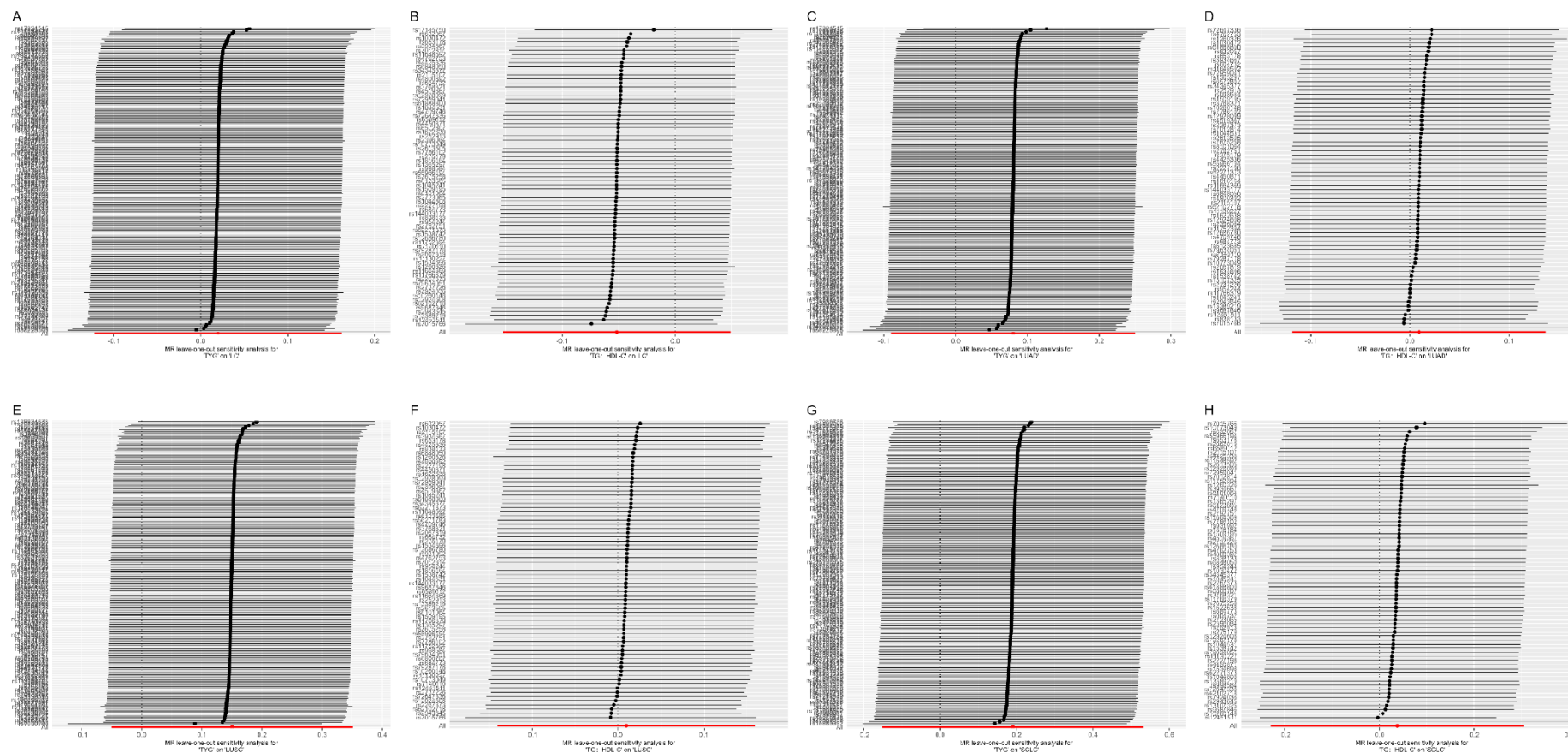


Figure S5. Leave-one-out analysis result of SNPs associated with indirect indicators of insulin resistance and the risk of lung cancer and its subtypes. (A, B) LC; (C, D) LUAD; (E, F) LUSC; (G, H) SCLC.

LC, lung cancer; LUAD, lung adenocarcinoma; LUSC, lung squamous cell carcinoma; SCLC, small cell lung cancer