

Table 1 Characteristics of case group and control group in the study

Variable	Case (n=510)	Control (n=504)	<i>P</i> value
Sex			0.911
Female	126(24.7)	123(24.4)	
Male	384(75.3)	381(75.6)	
Age, yr (mean±SD)	58.08 ± 10.548	57.27 ± 10.852	0.227
Pathological stypes			
squamous cell carcinoma	169(33.1)		
adenocarcinoma	161 (31.6)		
SCLC	97(19.0)		

Abbreviations: SCLC: small cell lung cancer;

Table2 SNP in CYP4F2 and CYP3A5 gene

SNP ID	Genes	Band	Position	Role	Alleles A/B	<i>p</i> -HWE	<i>p</i> ^a	OR(95 % CI)
rs10242455	CYP3A5	7	99642556	intron variant	G/A	0.396	0.403	0.92 (0.76 -1.12)
rs2108622	CYP4F2	19	15879621	missense	T/C	0.664	0.349	0.91 (0.75 -1.11)
rs3093106	CYP4F2	19	15897447	synonymous codon	C/T	1.000	0.128	0.80 (0.61 -1.07)
rs3093105	CYP4F2	19	15897578	missense	C/A	1.000	0.112	0.80 (0.60 -1.05)

Notes: a Two-sided χ^2 tests; * $p \leq 0.05$ indicates statistical significance

Abbreviations: SNP, single-nucleotide polymorphism; OR, odds ratio; 95% CI, 95 % confidence interval; HWE, Hardy–Weinberg equilibrium

Table 3 Association between CYP4F2 gene polymorphism and lung cancer under different stratification analysis (adjusted by sex and age)

SNP ID		Years ≥58		Years <58		Male		Female		Adenocarcinoma		SCC		SCLC	
		OR (95 % CI)	p ^a	OR (95 % CI)	p ^a	OR (95 % CI)	p ^a	OR (95 % CI)	p ^a	OR (95 % CI)	p ^a	OR (95 % CI)	p ^a	OR (95 % CI)	p ^a
rs3093105	Alleles														
	C/A	0.59 (0.37-0.93)	0.023*	1.02 (0.68-1.52)	0.942	0.68 (0.49-0.93)	0.017*	1.41 (0.77-2.58)	0.260	0.59 (0.37-0.93)	0.023	1.01 (0.69-1.48)	0.951	0.75 (0.45-1.26)	0.277
	Genotype														
	A/A	1	0.073	1	0.995	1	0.049*	1	0.478	1	0.105	1	0.641	1	0.820
	C/A	0.66 (0.43-1.02)		1.00 (0.63-1.57)		0.71 (0.50-1.01)		1.27 (0.66-2.45)		0.60 (0.36-0.99)		1.01 (0.66-1.55)		0.84 (0.48-1.46)	
	C/C	0.21 (0.02-1.91)		1.08 (0.22-5.44)		0.26 (0.05-1.27)		31.989E+09 (0.00-∞)		0.45 (0.05-3.74)		0.36 (0.04-3.01)		2.949E-09 (0-∞)	
	Dominant														
	A/A		0.035*		0.100	1	0.029*	1	0.334	1	0.034*	1	0.880	1	0.389
	C/A-C/C	0.63 (0.41-0.97)		1.00 (0.64-1.56)		0.68 (0.48-0.96)		1.38 (0.72-2.64)		0.59 (0.36-0.96)		0.97 (0.64-1.47)		0.78 (0.45-1.36)	
	Recessive														
	A/A-C/A	1	0.191	1	0.923	1	0.114	1	0.100	1	0.514	1	0.346	1	0.999

rs3093106	C/C	0.23 (0.03-2.08)		1.08 (0.22-5.43)		0.28 (0.06-1.36)		1.887E+09 (0-inf)		0.50 (0.06-4.09)		0.36 (0.04-2.99)		3.061E-09 (0-∞)	
	Additive														
	A/A	0.63 (0.42-0.94)	0.023*	1.01 (0.67-1.51)	0.980	0.67 (0.48-0.93)	0.016*	1.47 (0.80-2.71)	0.220	0.61 (0.38-0.97)	0.035*	0.93 (0.63-1.37)	0.704	0.75 (0.44-1.27)	0.280
	C/A														
	C/C														
	Alleles														
	C/T	0.60 (0.38-0.94)	0.029*	1.02 (0.68-1.52)	0.942	0.68 (0.50-0.94)	0.020*	1.41 (0.77-2.58)	0.260	0.60 (0.38-0.94)	0.025*	1.02 (0.70-1.49)	1.02	0.76 (0.45-1.27)	0.293
	Genotype														
	T/T	1	0.089		0.995	1	0.060	1	0.478	1	0.114	1	0.636	1	0.839
	C/T	0.68 (0.44-1.04)		1.00 (0.63-1.57)		0.72 (0.51-1.03)		1.27 (0.66-2.45)		0.60 (0.37-1.00)		1.03 (0.67-1.57)		0.85 (0.48-1.47)	
	C/C	0.21 (0.02-1.92)		1.08 (0.22-5.44)		0.26 (0.05-1.27)		31.989E+09 (0.00-∞)		0.45 (0.05-3.74)		0.37 (0.04-3.02)		2.956E-09 (0-∞)	
	Dominant														
	T/T	1	0.045*		0.100	1	0.036*	1	0.334	1	0.038*	1	0.940	1	0.408
	C/T-C/C	0.65 (0.42-0.99)		1.00 (0.64-1.56)		0.69 (0.48-0.9)		1.38 (0.72-2.64)		0.59 (0.36-0.97)		0.98 (0.65-1.50)		0.79 (0.45-1.38)	
	Recessive														
	T/T-C/T	1	0.190	1	0.923	1	0.114	1	0.100	1	0.514	1	0.346	1	0.999

C/C	0.23		1.08		0.28		1.887E+09		0.50		0.36		3.061E-09	
	(0.03-2.08)		(0.22-5.43)		(0.06-1.36)		(0-inf)		(0.06-4.09)		(0.04-2.99)		(0-∞)	
Additive														
T/T	0.64	0.029*	1.01	0.980	0.68	0.019*	1.47	0.220	0.61	0.039*	0.94	0.757	0.75	0.294
	(0.43-0.96)		(0.67-1.51)		(0.49-0.94)		(0.80-2.71)		(0.39-0.98)		(0.64-1.39)		(0.45-1.28)	
C/T														
C/C														

Notes: a Two-sided χ^2 tests; * $p\leq 0.05$ indicates statistical significance

Abbreviation: SNP, single-nucleotide polymorphism; OR, odds ratio;95% CI, 95 % confidence interval; SCC: Squamous cell carcinoma; SCLC: small cell lung cancer

Table 4 Association between CYP3A5 gene polymorphism and lung cancer under different pathological types (adjusted by sex and age)

SNP ID			SCC		Adenocarcinoma		SCLC	
			OR(95 % CI)	p^a	OR(95 % CI)	p^a	OR(95 % CI)	p^a
rs10242455	Alleles	G/A	0.71 (0.53-0.94)	0.018*	1.26(0.96-1.64)	0.091	0.82(0.58-1.16)	0.261
	Genotype	A/A	1	0.064	1	0.252	1	0.317
		G/A	0.67 (0.46-0.98)		1.29(0.88-1.88)		0.70(0.44-1.11)	
		G/G	0.57 (0.27-1.19)		1.58(0.83-3.02)		0.85(0.37-1.91)	
	Dominant	A/A	1	0.021*	1	0.126	1	0.145
		G/A-G/G	0.66 (0.46-0.94)		1.33(0.92-1.92)		0.72(0.46-1.12)	
	Recessive	A/A-G/A	1	0.274	1	0.290	1	0.970
		G/G	0.67 (0.32-1.38)		1.40(0.75-2.58)		0.98(0.44-2.18)	
	Additive	A/A	0.71 (0.53-0.95)	0.023*	1.27(0.96-1.68)	0.097	0.81(0.57-1.16)	0.248
		G/A						
		G/G						

Notes: a Two-sided χ^2 tests; * $p \leq 0.05$ indicates statistical significance;

Abbreviations: SNP, single-nucleotide polymorphism; OR, odds ratio; 95% CI, 95 % confidence interval; SCC: Squamous cell carcinoma; SCLC: small cell lung cancer;