

Polymorphisms in oxidative stress-related genes in NSCLC

Table S1. Candidate genes and SNPs included in the study

| Gene | SNP | Chromosome | Rare allele | Common allele | MAF | Function | HWE-P |
|---------|------------|------------|-------------|---------------|------|-----------|---------|
| SOD2 | rs4880 | 6 | C | T | 0.15 | Val16Ala | 0.284 |
| GSTP1 | rs1695 | 11 | G | A | 0.21 | Ile105Val | 0.787 |
| TXN2 | rs2281082 | 22 | G | T | 0.29 | Intronic | 0.104 |
| PPARG* | rs1801282 | 3 | G | C | 0.07 | Pro12Ala | < 0.001 |
| GPX1 | rs1800668 | 3 | T | C | 0.09 | Promoter | 0.339 |
| CAT | rs769214 | 11 | A | G | 0.29 | 5' UTR | 0.087 |
| PON1 | rs662 | 7 | A | G | 0.35 | Q192R | 0.491 |
| NOS2 | rs2297518 | 17 | A | G | 0.18 | Ser608Leu | 0.410 |
| NOS3 | rs1799983 | 7 | T | G | 0.14 | Glu298Asp | 0.829 |
| MPO | rs2333227 | 17 | G | A | 0.16 | Promoter | 0.426 |
| GPX1 | rs1050450 | 3 | T | C | 0.11 | Pro200Leu | 0.614 |
| NQO1 | rs1800566 | 16 | T | C | 0.49 | Pro187Ser | 0.067 |
| CYBA | rs4673 | 16 | T | C | 0.08 | His72Tyr | 0.209 |
| AKR1C3* | rs1937840 | 10 | C | G | 0.19 | Intronic | < 0.001 |
| RAC1 | rs10951982 | 7 | A | G | 0.20 | Intronic | 0.092 |
| KL | rs3752472 | 13 | T | C | 0.10 | Pro514Ser | 0.497 |
| BLVRA | rs699512 | 7 | G | A | 0.32 | Thr3Ala | 1.000 |
| GPX4 | rs713041 | 19 | T | C | 0.46 | 3' UTR | 0.090 |
| GCLC | rs17883901 | 6 | T | C | 0.12 | Promoter | 0.990 |
| MT2A | rs10636 | 16 | C | G | 0.32 | 3' UTR | 0.910 |

MAF: minor allele frequency; HWE: Hardy-Weinberg equilibrium. *indicates SNPs deviated from Hardy-Weinberg equilibrium and thus excluded from the analysis.

Table S2. Associations between SNPs and progression-free and overall survival of NSCLC patients

| Gene | SNP | Progression-free survival | | Overall survival | |
|-------|------------|---------------------------|---------|---------------------|---------|
| | | HR (95% CI) | P value | HR (95% CI) | P value |
| SOD2 | rs4880 | 0.819 (0.601-1.114) | 0.203 | 1.158 (0.859-1.560) | 0.336 |
| GSTP1 | rs1695 | 1.293 (0.967-1.730) | 0.083 | 0.679 (0.510-0.904) | 0.008 |
| TXN2 | rs2281082 | 1.171 (0.933-1.471) | 0.174 | 0.936 (0.752-1.165) | 0.553 |
| GPX1 | rs1800668 | 1.224 (0.830-1.804) | 0.308 | 0.848 (0.594-1.209) | 0.361 |
| CAT | rs769214 | 1.009 (0.797-1.277) | 0.941 | 1.035 (0.820-1.308) | 0.770 |
| PON1 | rs662 | 1.012 (0.803-1.274) | 0.921 | 1.085 (0.861-1.367) | 0.489 |
| NOS2 | rs2297518 | 0.934 (0.688-1.267) | 0.659 | 0.776 (0.579-1.040) | 0.090 |
| NOS3 | rs1799983 | 0.736 (0.537-1.009) | 0.057 | 1.168 (0.842-1.620) | 0.354 |
| MPO | rs2243828 | 0.934 (0.702-1.242) | 0.639 | 0.685 (0.519-0.904) | 0.007 |
| GPX1 | rs1050450 | 1.146 (0.793-1.658) | 0.468 | 1.193 (0.838-1.697) | 0.327 |
| NQO1 | rs1800566 | 0.951 (0.759-1.190) | 0.659 | 0.932 (0.801-1.085) | 0.366 |
| CYBA | rs4673 | 1.349 (0.895-2.035) | 0.153 | 0.783 (0.556-1.101) | 0.159 |
| RAC1 | rs10951982 | 1.173 (0.862-1.596) | 0.310 | 0.972 (0.730-1.296) | 0.848 |
| KL | rs3752472 | 0.901 (0.608-1.335) | 0.603 | 1.113 (0.772-1.606) | 0.565 |
| BLVRA | rs699512 | 0.969 (0.763-1.231) | 0.799 | 0.786 (0.628-0.985) | 0.036 |
| GPX4 | rs713041 | 0.874 (0.714-1.069) | 0.190 | 0.903 (0.735-1.108) | 0.329 |
| MT2A | rs10636 | 1.042 (0.827-1.314) | 0.726 | 1.000 (0.794-1.262) | 0.997 |
| GCLC | rs17883901 | 0.968 (0.684-1.372) | 0.857 | 1.145 (0.868-1.511) | 0.338 |