# Supplementary Materials

Table S1 PCR primer sequences used in this study

|  |  |  |  |
| --- | --- | --- | --- |
| SNP | Primer name | Sequence 5′ to 3′ | Length |
| rs1181865 | Forward | CGGGCTCTGGTGTGACGG | 95bp |
|  | Reverse | AGGAAGCTCCGCCGAGTT |
| rs9800 | Forward | GAAACTCAAGTGGGGTGCC | 105bp |
|  | Reverse | TGACTCAACCTAAATCTCCAAAGG |
| rs3737589 | Forward | ACCCAGTCCACAATCATCTCA | 93bp |
|  | Reverse | CCACCTGAATGCTGCCTTATC |
| rs2298222 | Forward | AGATGCCCACCTGCTCTC | 85bp |
|  | Reverse | CTGGGGAGGATCCACTGG |
| rs7515164 | Forward | ACACCTAAGCAAGCCCAA | 84bp |
|  | Reverse | CCATGTATGTTTCATTTCTGGTTT |

Table S2 Probe sequences used in this study

|  |  |  |
| --- | --- | --- |
| SNP | Probe name | Sequence 5′ to 3′ |
| rs1181865 | TC | GTGCCATGCCAAGCCCTGGCCCCAC |
|  | TT | CTGGTGCCATGCCAAGCCCTGGCCCCAT |
|  | TR | CTTCCTGGCTAGCGCTCACGCCGTC |
| rs9800 | TC | CTGAGGGCTCAGACAAACAGGGCGGCTCC |
|  | TG | CTGACTGGGGCTCAGACAAACAGGGCGGCTCG |
|  | TR | TCACAGGCAGGAAGCCCGTGGCCTCCTG |
| rs3737589 | TA | CTGACTGAGGATCAACAGTGGGGAGTTACCCTA |
|  | TG | CTGACTGACTGGGATCAACAGTGGGGAGTTACCCTG |
|  | TR | CAGACCAGTATGTATCTGGCTTGTGCTGACT |
| rs2298222 | TA | CTGACTGACTGATTTAGGGAAGCCGGAGAGGCCGCCA |
|  | TG | CTGACTGACTGACTGTTTAGGGAAGCCGGAGAGGCCGCCG |
|  | TR | GGAACAGGCAGTGACGGCGGTGATCCTGACTGAC |
| rs7515164 | TA | CTGACTGACTGACTGAAACTTGTGTCCTTGGTCTGAAGTCA |
|  | TC | CTGACTGACTGACTGACTGAACTTGTGTCCTTGGTCTGAAGTCC |
|  | TR | CATCCTGAAAAGCCTGGTTAAACCACTGACTGACTGA |

Table S3: Association between *TP73-AS1* gene polymorphisms and risk of gastric cancer (rs9800, rs2298222, rs7515164)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Genotype | Case N | Control N | Crude OR (95%CI) | P | Adjusted OR(95%CI)\* | *P* |
| overall | 1000 | 1000 |  |  |  |  |
| rs9800 |  |  |  |  |  |  |
| GG | 615 | 623 | 1 |  | 1 |  |
| GC | 343 | 335 | 1.04 (0.86-1.25) | *0.702* | 1.01 (0.83-1.22) | 0.934 |
| CC | 42 | 42 | 1.01 (0.65-1.58) | *0.954* | 0.99 (0.63-1.55) | 0.947 |
| GC+CC | 385 | 377 | 1.04 (0.86-1.24) | *0.713* | 1.01 (0.84-1.21) | 0.956 |
| G | 1573 | 1581 | 1 |  |  |  |
| C | 427 | 419 | 1.02 (0.88-1.19) | *0.757* |  |  |
| HWE |  | 0.718 |  |  |  |  |
| rs2298222 |  |  |  |  |  |  |
| GG | 634 | 673 | 1 |  | 1 |  |
| GA | 327 | 290 | 1.20 (0.99-1.45) | *0.066* | 1.20 (0.98-1.46) | 0.073 |
| AA | 39 | 37 | 1.12 (0.70-1.78) | *0.634* | 1.22 (0.76-1.97) | 0.409 |
| GA+AA | 366 | 327 | 1.19 (0.99-1.43) | *0.067* | 1.20 (0.99-1.45) | 0.062 |
| G | 1595 | 1636 |  |  |  |  |
| A | 405 | 364 | 1.14 (0.98-1.34) | *0.100* |  |  |
| HWE |  | 0.410 |  |  |  |  |
| rs7515164 |  |  |  |  |  |  |
| CC | 883 | 904 | 1 |  | 1 |  |
| CA | 111 | 94 | 1.21 (0.91-1.62) | *0.200* | 1.24 (0.92-1.67) | *0.159* |
| AA | 6 | 2 | 3.07 (0.62-15.26) | *0.170* | 3.40 (0.67-17.42) | *0.141* |
| CA+AA | 117 | 96 | 1.25 (0.94-1.66) | *0.129* | 1.28 (0.96-1.71) | *0.097* |
| C | 1877 | 1902 |  |  |  |  |
| A | 123 | 98 | 1.27(0.97-1.67) | *0.070* |  |  |
| HWE |  | 0.786 |  |  |  |  |

Abbreviations: OR, odds ratio; CI, confidence interval; HWE, Hardy-Weinberg expectations.

\*Adjusted for age, sex, smoking status, drinking status, residence, hypertension, diabetes, and family history of GC in the logistic regression model.

Table S4: Associations between variant *TP73-AS1* genotypes and clinicopathologic characteristics of gastric cancer (rs1181865)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | AG+GG, AA for rs1181865 | | Logistic regression for rs1181865 | | |
| AG+GG, n | AA, n | Adjusted OR  (95% CI) \* | *P* |  |
| Tumor differentiation |  |  |  |  |  |
| Well | 53 | 10 | 1 |  |  |
| Moderate | 371 | 125 | 0.58 (0.29-1.19) | 0.140 |  |
| Poor | 333 | 108 | 0.61 (0.30-1.25) | 0.175 |  |
| Depth of tumor infiltration |  |  |  |  |  |
| T1+T2 | 270 | 87 | 1 |  |  |
| T3+T4 | 487 | 156 | 1.03 (0.76-1.41) | 0.830 |  |
| Lymph node metastasis |  |  |  |  |  |
| Negative | 282 | 85 | 1 |  |  |
| Positive | 475 | 158 | 0.91 (0.67-1.23) | 0.533 |  |
| Localization |  |  |  |  |  |
| Cardia | 347 | 122 | 1 |  |  |
| Noncardia | 410 | 121 | 1.17 (0.87-1.57) | 0.304 |  |

Abbreviations: OR, odds ratio; CI, confidence interval.

\*Adjusted for age, sex, smoking status, drinking status, residence, hypertension, diabetes, and FH of GC in logistic regression model.