Table S1 False-positive report probability analysis for the positive findings between *PCNXL2* polymorphisms and thyroid cancer risk

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Genotype and Variables | OR (95 % CI) | *p* Value a | Statistical Power b | Prior Probability | | | |  |
| 0.25 | 0.1 | 0.01 | 0.001 | 0.0001 |
| rs10910660 T > C |  |  |  |  |  |  |  |  |
| C Vs T | 1.33 (1.04-1.71) | 0.022 | 0.999 | 0.073 c | 0.191 c | 0.721 | 0.963 | 0.996 |
| TC Vs TT | 1.44 (1.09-1.92) | 0.012 | 0.987 | 0.038 c | 0.106 c | 0.565 | 0.929 | 0.992 |
| TC-CC Vs TT | 1.42 (1.08-1.88) | 0.012 | 0.992 | 0.042 c | 0.115 c | 0.588 | 0.935 | 0.993 |
| rs12129938 A > G |  |  |  |  |  |  |  |  |
| AG Vs AA | 0.69 (0.51-0.93) | 0.015 | 0.983 | 0.043 c | 0.120 c | 0.599 | 0.938 | 0.993 |
| GA-GG Vs AA | 0.74 (0.55-0.98) | 0.039 | 0.997 | 0.097 c | 0.243 | 0.780 | 0.973 | 0.997 |
| Age> 45 |  |  |  |  |  |  |  |  |
| rs10910660 T > C |  |  |  |  |  |  |  |  |
| C Vs T | 1.44 (1.02-2.02) | 0.036 | 0.953 | 0.166 c | 0.374 | 0.868 | 0.985 | 0.998 |
| TC Vs TT | 1.71 (1.15-2.55) | 0.008 | 0.779 | 0.032 c | 0.089 c | 0.519 | 0.916 | 0.991 |
| TC-CC Vs TT | 1.62 (1.10-2.38) | 0.014 | 0.859 | 0.047 c | 0.128 c | 0.617 | 0.942 | 0.994 |
| rs12129938 A > G |  |  |  |  |  |  |  |  |
| GG Vs AA | 10.06 (1.28-79.31) | 0.028 | 0.063 | 0.577 | 0.803 | 0.978 | 0.998 | 1.000 |
| GG Vs AA-AG | 10.63 (1.35-83.68) | 0.025 | 0.056 | 0.569 | 0.798 | 0.978 | 0.998 | 1.000 |
| Age≤ 45 |  |  |  |  |  |  |  |  |
| rs12129938 A > G |  |  |  |  |  |  |  |  |
| G Vs A | 0.61 (0.42-0.89) | 0.009 | 0.849 | 0.035 c | 0.099 c | 0.546 | 0.924 | 0.992 |
| AG Vs AA | 0.62 (0.40-0.96) | 0.032 | 0.833 | 0.104 c | 0.258 | 0.792 | 0.975 | 0.997 |
| GA-GG Vs AA | 0.59 (0.39-0.91) | 0.015 | 0.773 | 0.062 c | 0.165 c | 0.685 | 0.956 | 0.995 |
| rs4649295 C > T |  |  |  |  |  |  |  |  |
| T Vs C | 0.70 (0.50-0.98) | 0.036 | 0.975 | 0.104 c | 0.258 | 0.793 | 0.975 | 0.997 |
| Men |  |  |  |  |  |  |  |  |
| rs10910660 T > C |  |  |  |  |  |  |  |  |
| TC Vs TT | 1.72 (1.02-2.91) | 0.042 | 0.713 | 0.154 c | 0.353 | 0.857 | 0.984 | 0.998 |
| TC-CC Vs TT | 1.71 (1.08-2.84) | 0.038 | 0.727 | 0.136 c | 0.321 | 0.839 | 0.981 | 0.998 |
| Women |  |  |  |  |  |  |  |  |
| rs6424270 T > C |  |  |  |  |  |  |  |  |
| TC Vs TT | 0.72 (0.53-0.99) | 0.041 | 0.988 | 0.116 c | 0.282 | 0.812 | 0.978 | 0.998 |
| rs12129938 A > G |  |  |  |  |  |  |  |  |
| AG Vs AA | 0.64 (0.45-0.92) | 0.014 | 0.909 | 0.050 c | 0.136 c | 0.635 | 0.946 | 0.994 |
| GA-GG Vs AA | 0.70 (0.49-0.99) | 0.041 | 0.971 | 0.119 c | 0.288 | 0.817 | 0.978 | 0.998 |

*p* value a was calculated by unconditional logistic regression analysis with adjustment for age and gender.

Statistical power b was calculated using the number of observations in the subgroup and the OR and *p* values in this table.

c The level of false-positive report probability threshold was set at 0.2 and noteworthy findings are presented.