|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Without Clinical Heterogeneity | | | | With Clinical Heterogeneity | | | |
|  | z-stat | SD of z | OR | p-val | z-stat | SD of z | OR | p-val |
| Model I, g | 5.36 | 1.02 | 1.18 | 8.22E-08 | 4.67 | 1.00 | 1.16 | 3.06E-06 |
| Model II, g | 5.36 | 1.02 | 1.18 | 8.15E-08 | 4.99 | 1.00 | 1.17 | 6.05E-07 |
| Model II, s | 13.95 | 0.94 | 1.90 | 2.94E-44 | 11.14 | 0.95 | 1.68 | 7.77E-29 |
| Model III, g | 4.64 | 0.99 | 1.19 | 3.344-06 | 5.85 | 1.00 | 1.24 | 4.80E-09 |
| Model III, s | 10.20 | 0.94 | 1.92 | 1.93E-24 | 10.22 | 0.96 | 1.92 | 1.64E-24 |
| Model III, g:s | -0.15 | 0.96 | 0.99 | 8.77E-01 | -3.08 | 0.99 | 0.80 | 2.10E-03 |
| Model IV, g, s=0 | 4.64 | 0.99 | 1.19 | 3.44E-06 | 5.85 | 1.00 | 1.24 | 4.80E-09 |
| Model IV, g, s=1 | 2.69 | 0.98 | 1.18 | 7.14E-03 | -0.08 | 0.98 | 1.00 | 0.94 |

Table A. Average test output from four types of logistic regression on 1,000 simulated datasets. Data was simulated based on liability threshold simulations with ascertainment and realistic effect sizes and allele frequencies.