# Table 2: Heritabilities for 98 quantitative traits under basic and dominance/household models

| Traits | Effect of Covariates[1] | | | Basic Model | | | | Dominance/Household Model | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Narrow H² | Broad H² | |
| | Sex | Age | Sex&Age | Sex | Age | Sex&Age | H² | $\sigma_g^2/\sigma^2$ | $(\sigma_g^2+\sigma_d^2)/\sigma^2$ | Signif[2] |
| **Blood Analyses** | | | | | | | | | | |
| RBC | 0.207 | 0.003 | 0.015 | **** | **** | **** | 0.672 | 0.655 | 0.779 | * |
| Hb | 0.360 | 0.002 | 0.010 | **** | **** | **** | 0.473 | 0.445 | 0.605 | ** |
| MCV | 0.007 | 0.036 | 0.004 | **** | **** | **** | 0.762 | 0.758 | 0.789 | |
| MCH | 0.018 | 0.020 | 0.003 | **** | **** | **** | 0.778 | 0.774 | 0.807 | |
| WBC | 0.034 | 0.010 | 0.004 | **** | **** | **** | 0.384 | 0.329 | 0.631 | **** |
| NE | 0.002 | 0.010 | 0.002 | **** | **** | * | 0.346 | 0.326 | 0.426 | |
| LY | 0.000 | 0.016 | 0.002 | | **** | ** | 0.345 | 0.318 | 0.451 | * |
| MO | 0.034 | 0.010 | 0.000 | **** | **** | | 0.404 | 0.378 | 0.519 | * |
| EO | 0.014 | 0.007 | 0.000 | **** | **** | | 0.378 | 0.364 | 0.444 | |
| BA | 0.000 | 0.001 | 0.000 | | | | 0.153 | 0.152 | 0.160 | |
| PLT | 0.050 | 0.020 | 0.002 | **** | **** | ** | 0.528 | 0.507 | 0.643 | * |
| HbF | 0.007 | 0.013 | 0.001 | **** | **** | | 0.641 | 0.631 | 0.706 | |
| HbA2 | 0.001 | 0.011 | 0.000 | ** | **** | | 0.721 | 0.705 | 0.842 | ** |
| HbA1C | 0.013 | 0.167 | 0.002 | **** | **** | ** | 0.587 | 0.553 | 0.809 | ** |
| G6PD | 0.003 | 0.013 | 0.005 | **** | **** | **** | 0.721 | 0.716 | 0.769 | |
| SERUM GLUCOSE | 0.048 | 0.193 | 0.003 | **** | **** | **** | 0.362 | 0.314 | 0.566 | *** |
| SERUM INSULIN | 0.000 | 0.004 | 0.005 | | **** | **** | 0.256 | 0.239 | 0.316 | |
| BUN | 0.054 | 0.111 | 0.015 | **** | **** | **** | 0.318 | 0.309 | 0.353 | |
| SERUM CREATININE | 0.222 | 0.017 | 0.002 | **** | **** | **** | 0.346 | 0.330 | 0.420 | |
| ALT | 0.169 | 0.061 | 0.030 | **** | **** | **** | 0.238 | 0.223 | 0.301 | |
| AST | 0.097 | 0.041 | 0.020 | **** | **** | **** | 0.236 | 0.213 | 0.345 | * |
| Gammagt | 0.237 | 0.139 | 0.016 | **** | **** | **** | 0.341 | 0.321 | 0.429 | |
| FIBRINOGEN | 0.066 | 0.081 | 0.002 | **** | **** | ** | 0.270 | 0.243 | 0.373 | * |
| CHOLESTEROL | 0.000 | 0.226 | 0.007 | * | **** | **** | 0.424 | 0.374 | 0.643 | **** |
| HDL | 0.112 | 0.016 | 0.006 | **** | **** | **** | 0.487 | 0.471 | 0.581 | * |
| LDL | 0.002 | 0.180 | 0.006 | **** | **** | **** | 0.425 | 0.377 | 0.658 | **** |
| TRIGLYCERIDES | 0.038 | 0.112 | 0.015 | **** | **** | **** | 0.322 | 0.295 | 0.428 | * |
| IRON | 0.048 | 0.002 | 0.003 | **** | **** | **** | 0.193 | 0.186 | 0.220 | |
| TRANSFERRIN | 0.024 | 0.017 | 0.004 | **** | **** | **** | 0.197 | 0.189 | 0.231 | |
| BILIRUBIN, fractionated | 0.054 | 0.016 | 0.000 | **** | **** | | 0.348 | 0.340 | 0.390 | |
| BILIRUBIN, total | 0.049 | 0.009 | 0.000 | **** | **** | | 0.425 | 0.413 | 0.483 | |
| URIC ACID | 0.288 | 0.082 | 0.008 | **** | **** | **** | 0.342 | 0.338 | 0.359 | |
| SODIUM | 0.002 | 0.017 | 0.002 | **** | **** | *** | 0.254 | 0.254 | 0.254 | |
| POTASSIUM | 0.004 | 0.043 | 0.001 | **** | **** | | 0.183 | 0.177 | 0.208 | |
| ESR | 0.210 | 0.056 | 0.002 | **** | **** | **** | 0.417 | 0.386 | 0.566 | ** |
| CRP | 0.002 | 0.030 | 0.001 | **** | **** | | 0.297 | 0.274 | 0.390 | |
| TSH | 0.001 | 0.026 | 0.000 | | **** | | 0.384 | 0.373 | 0.423 | |
| PSA | N/A | 0.101 | N/A | N/A | **** | N/A | 0.428 | 0.399 | 0.541 | |
| **Anthropometric Measures** | | | | | | | | | | |
| HEIGHT | 0.407 | 0.142 | 0.002 | **** | **** | **** | 0.801 | 0.770 | 1.000 | **** |
| WEIGHT | 0.247 | 0.115 | 0.009 | **** | **** | **** | 0.498 | 0.439 | 0.814 | **** |
| WAIST | 0.126 | 0.294 | 0.008 | **** | **** | **** | 0.370 | 0.312 | 0.648 | **** |
| HIP | 0.000 | 0.155 | 0.009 | | **** | **** | 0.450 | 0.386 | 0.754 | **** |
| BMI | 0.030 | 0.315 | 0.012 | **** | **** | **** | 0.427 | 0.355 | 0.781 | **** |
| **Cardiovascular Function** | | | | | | | | | | |
| systolic BP | 0.056 | 0.295 | 0.008 | **** | **** | **** | 0.259 | 0.162 | 0.657 | **** |
| diastolic BP | 0.034 | 0.271 | 0.005 | **** | **** | **** | 0.191 | 0.122 | 0.467 | **** |
| HR | 0.045 | 0.002 | 0.001 | **** | *** | | 0.272 | 0.234 | 0.409 | ** |
| diam_S | 0.155 | 0.109 | 0.005 | **** | **** | **** | 0.437 | 0.388 | 0.657 | **** |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| diam_D | 0.131 | 0.208 | 0.005 | **** | **** | **** | 0.446 | 0.393 | 0.681 | **** |
| IMT | 0.006 | 0.457 | 0.001 | **** | **** | **** | 0.187 | 0.132 | 0.381 | ** |
| PWV | 0.003 | 0.592 | 0.002 | **** | **** | **** | 0.226 | 0.224 | 0.233 | |
| pulse pressure | 0.025 | 0.172 | 0.007 | **** | **** | **** | 0.208 | 0.128 | 0.542 | **** |
| mean BP | 0.050 | 0.312 | 0.005 | **** | **** | **** | 0.230 | 0.147 | 0.562 | **** |
| Wall/lumen | 0.027 | 0.165 | 0.006 | **** | **** | **** | 0.224 | 0.194 | 0.356 | * |
| Vascular mass | 0.049 | 0.483 | 0.000 | **** | **** | * | 0.300 | 0.246 | 0.483 | ** |
| normalized PWV | 0.005 | 0.382 | 0.000 | **** | **** | | 0.195 | 0.195 | 0.195 | |
| QTC | 0.035 | 0.065 | 0.001 | **** | **** | | 0.165 | 0.130 | 0.287 | * |
| PR | 0.018 | 0.072 | 0.001 | **** | **** | | 0.285 | 0.273 | 0.338 | |
| PSV | 0.029 | 0.551 | 0.003 | **** | **** | **** | 0.326 | 0.269 | 0.570 | **** |
| EDV | 0.001 | 0.318 | 0.003 | *** | **** | **** | 0.184 | 0.117 | 0.437 | **** |
| IP | 0.106 | 0.191 | 0.002 | **** | **** | **** | 0.250 | 0.171 | 0.577 | **** |
| SD_ratio | 0.058 | 0.144 | 0.001 | **** | **** | ** | 0.264 | 0.195 | 0.544 | **** |
| AT | 0.014 | 0.027 | 0.007 | **** | **** | **** | 0.090 | 0.078 | 0.138 | |
| vti | 0.008 | 0.249 | 0.008 | **** | **** | **** | 0.255 | 0.225 | 0.367 | * |
| **Psychological Traits** | | | | | | | | | | |
| NEO N | 0.075 | 0.006 | 0.000 | **** | **** | | 0.258 | 0.211 | 0.448 | ** |
| NEO E | 0.010 | 0.090 | 0.004 | **** | **** | **** | 0.257 | 0.220 | 0.393 | * |
| NEO O | 0.017 | 0.168 | 0.011 | **** | **** | **** | 0.329 | 0.285 | 0.536 | *** |
| NEO A | 0.058 | 0.118 | 0.001 | **** | **** | * | 0.230 | 0.211 | 0.306 | |
| NEO C | 0.002 | 0.053 | 0.000 | **** | **** | | 0.206 | 0.160 | 0.373 | ** |
| NEO N1 | 0.124 | 0.000 | 0.003 | **** | | **** | 0.180 | 0.145 | 0.307 | * |
| NEO N2 | 0.005 | 0.005 | 0.000 | **** | **** | | 0.214 | 0.191 | 0.303 | |
| NEO N3 | 0.047 | 0.014 | 0.000 | **** | **** | | 0.247 | 0.210 | 0.399 | * |
| NEO N4 | 0.027 | 0.000 | 0.000 | **** | | | 0.196 | 0.184 | 0.242 | |
| NEO N5 | 0.000 | 0.118 | 0.006 | | **** | **** | 0.144 | 0.101 | 0.323 | ** |
| NEO N6 | 0.082 | 0.013 | 0.000 | **** | **** | | 0.137 | 0.114 | 0.216 | |
| NEO E1 | 0.003 | 0.001 | 0.002 | **** | | ** | 0.191 | 0.189 | 0.199 | |
| NEO E2 | 0.003 | 0.049 | 0.008 | **** | **** | **** | 0.221 | 0.197 | 0.307 | |
| NEO E3 | 0.026 | 0.014 | 0.004 | **** | **** | **** | 0.211 | 0.146 | 0.434 | **** |
| NEO E4 | 0.000 | 0.007 | 0.003 | | **** | **** | 0.190 | 0.166 | 0.274 | |
| NEO E5 | 0.080 | 0.194 | 0.004 | **** | **** | **** | 0.157 | 0.115 | 0.321 | ** |
| NEO E6 | 0.000 | 0.093 | 0.005 | | **** | **** | 0.166 | 0.147 | 0.235 | |
| NEO O1 | 0.008 | 0.153 | 0.008 | **** | **** | **** | 0.218 | 0.205 | 0.275 | |
| NEO O2 | 0.033 | 0.010 | 0.019 | **** | **** | **** | 0.254 | 0.222 | 0.382 | * |
| NEO O3 | 0.024 | 0.054 | 0.006 | **** | **** | **** | 0.153 | 0.131 | 0.241 | |
| NEO O4 | 0.011 | 0.069 | 0.000 | **** | **** | | 0.185 | 0.164 | 0.265 | |
| NEO O5 | 0.000 | 0.087 | 0.004 | | **** | **** | 0.267 | 0.241 | 0.374 | |
| NEO O6 | 0.001 | 0.140 | 0.005 | | **** | **** | 0.188 | 0.151 | 0.324 | * |
| NEO A1 | 0.001 | 0.034 | 0.001 | * | **** | * | 0.205 | 0.189 | 0.262 | |
| NEO A2 | 0.060 | 0.067 | 0.004 | **** | **** | **** | 0.181 | 0.131 | 0.389 | ** |
| NEO A3 | 0.042 | 0.008 | 0.001 | **** | **** | * | 0.148 | 0.145 | 0.160 | |
| NEO A4 | 0.009 | 0.117 | 0.003 | **** | **** | **** | 0.132 | 0.132 | 0.132 | |
| NEO A5 | 0.029 | 0.051 | 0.000 | **** | **** | | 0.148 | 0.120 | 0.258 | |
| NEO A6 | 0.032 | 0.030 | 0.003 | **** | **** | **** | 0.096 | 0.079 | 0.160 | |
| NEO C1 | 0.013 | 0.026 | 0.002 | **** | **** | ** | 0.168 | 0.136 | 0.280 | * |
| NEO C2 | 0.002 | 0.008 | 0.000 | ** | **** | | 0.182 | 0.173 | 0.216 | |
| NEO C3 | 0.002 | 0.075 | 0.000 | ** | **** | | 0.129 | 0.091 | 0.264 | * |
| NEO C4 | 0.007 | 0.005 | 0.000 | **** | **** | | 0.118 | 0.098 | 0.186 | |
| NEO C5 | 0.003 | 0.027 | 0.001 | **** | **** | | 0.178 | 0.128 | 0.361 | ** |
| NEO C6 | 0.002 | 0.070 | 0.000 | **** | **** | | 0.156 | 0.093 | 0.376 | **** |

[1]: Effect of a covariate is the proportion of total phenotypic variance contributed to the covariate under the BASIC model

[2]: Column Signif is calculated based on a likelihood ratio test comparing a BASIC model with a dominance / household model

\*:   p-value < 0.05

\*\*:  p-value < 0.01

\*\*\*:  p-value < 0.001

\*\*\*\*: p-value < 0.0005