S9 Table. Unadjusted and adjusted ORs for cross-trait analysis of angina, depression and chronic pain overall and within same-gender sibling-pairs.

| Exposure (Sib1 status) | Outcome (Sib2 status) | Gender | Unadjusted |  | Adjusted |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | N | OR | N | OR |
| Angina | Chronic pain | Overall ${ }^{\dagger}$ | 4,014 | $\begin{gathered} 2.61 \\ {[2.03 \text { to } 3.37]} \\ * * * \end{gathered}$ | 3,275 | $\begin{gathered} 2.19 \\ {[1.63 \text { to } 2.95]} \\ * * * \end{gathered}$ |
|  |  | Femaleonly sib pairs | 1,475 | $\begin{gathered} 2.36 \\ {[1.55 \text { to } 3.60]} \\ * * * \end{gathered}$ | 1,207 | $\begin{gathered} 2.12 \\ {[1.32 \text { to } 3.38]} \\ * * \end{gathered}$ |
|  |  | Maleonly sib pairs | 665 | $\begin{gathered} 2.02 \\ {[1.03 \text { to } 3.92] *} \end{gathered}$ | 537 | $\begin{gathered} 0.96 \\ {[0.40 \text { to } 2.29]} \end{gathered}$ |
| Angina | Depression | Overall ${ }^{\dagger}$ | 4,595 | $\begin{gathered} 1.52 \\ {[1.16 \text { to } 1.99]} \\ * * \end{gathered}$ | 3,967 | $\begin{gathered} 1.48 \\ {[1.09 \text { to } 2.01]} \\ * * \end{gathered}$ |
|  |  | Femaleonly sib pairs | 1,704 | $\begin{gathered} \hline 1.23 \\ {[0.80 \text { to } 1.90]} \end{gathered}$ | 1,450 | $\begin{gathered} 1.08 \\ {[0.65 \text { to } 1.78]} \end{gathered}$ |
|  |  | Maleonly sib pairs | 768 | $\begin{gathered} 1.44 \\ {[0.66 \text { to } 3.16]} \end{gathered}$ | 672 | $\begin{gathered} 1.43 \\ {[0.63 \text { to } 3.28]} \end{gathered}$ |
| Chronic pain | Angina | Overall ${ }^{+}$ | 4,026 | $\begin{gathered} 2.48 \\ {[1.93 \text { to } 3.19]} \end{gathered}$ | 3,280 | $\begin{gathered} 2.01 \\ {[1.49 \text { to } 2.71]} \\ * * * \end{gathered}$ |
|  |  | Femaleonly sib pairs | 1,514 | $\begin{gathered} 2.49 \\ {[1.67 \text { to } 3.73]} \\ * * * \end{gathered}$ | 1,234 | $\begin{gathered} 2.38 \\ {[1.47 \text { to } 3.84]} \\ * * * \end{gathered}$ |
|  |  | Maleonly sib pairs | 660 | $\begin{gathered} 2.41 \\ {[1.17 \text { to } 4.98] *} \end{gathered}$ | 542 | $\begin{gathered} 2.26 \\ {[0.96 \text { to } 5.31]} \end{gathered}$ |
| Chronic pain | Depression | Overall ${ }^{\dagger}$ | 3,831 | $\begin{gathered} 1.84 \\ {[1.50 \text { to } 2.26]} \\ * * * \end{gathered}$ | 3,295 | $\begin{gathered} 1.69 \\ {[1.34 \text { to } 2.14]} \\ * * * \end{gathered}$ |
|  |  | Femaleonly sib pairs | 1,428 | $\begin{gathered} 1.69 \\ {[1.25 \text { to } 2.27]} \\ * * * \\ \hline \end{gathered}$ | 1,210 | $\begin{gathered} 1.53 \\ {[1.08 \text { to } 2.16] *} \end{gathered}$ |
|  |  | Maleonly sib pairs | 643 | $\begin{gathered} 2.24 \\ {[1.19 \text { to } 4.21]} \\ * * \end{gathered}$ | 562 | $\begin{gathered} 2.09 \\ {[1.04 \text { to } 4.17]} \end{gathered}$ |
| Depression | Angina | Overall ${ }^{+}$ | 4,562 | $\begin{gathered} 1.97 \\ {[1.54 \text { to } 2.54]} \\ * * * \end{gathered}$ | 3,757 | $\begin{gathered} 1.98 \\ {[1.49 \text { to } 2.65]} \\ * * * \end{gathered}$ |
|  |  | Femaleonly sib pairs | 1,704 | $\begin{gathered} 1.97 \\ {[1.32 \text { to } 2.94]} \\ * * * \\ \hline \end{gathered}$ | 1,406 | $\begin{gathered} 2.03 \\ {[1.29 \text { to } 3.20]} \\ * * \\ \hline \end{gathered}$ |
|  |  | Maleonly sib pairs | 769 | $\begin{gathered} 2.92 \\ {[1.53 \text { to } 5.57]} \\ * * * \end{gathered}$ | 634 | $\begin{gathered} 2.38 \\ {[1.18 \text { to } 5.06] *} \end{gathered}$ |
| Depression | Chronic pain | Overall ${ }^{+}$ | 3,796 | $\begin{gathered} 1.30 \\ {[1.05 \text { to } 1.61] *} \end{gathered}$ | 3,124 | 1.34 |


$\lambda_{\mathrm{S}}=$ sibling recurrence risk ratio $; \mathrm{p} \leq 0.05 ;{ }^{* *} \mathrm{p} \leq 0.01 ;{ }^{* * *} \mathrm{p} \leq 0.001 ;^{\dagger}$ overall results are also shown in Table 5.

