

Table S4: Coverage (%) with exchangeable working correlation matrix and robust standard errors, uncorrected and with three finite-sample corrections

| k | ρ_O | ρ_M | No finite-sample correction | | | | | KC correction | | | | | MD correction | | | | | FG correction | | | | |
|----|----------|----------|-----------------------------|-----------|-------|--------|---------|---------------|-----------|-------|--------|---------|---------------|-----------|-------|--------|---------|---------------|-----------|-------|--------|---------|
| | | | CRA-GEE | A-CRA-GEE | W-GEE | CW-GEE | MMI-GEE | CRA-GEE | A-CRA-GEE | W-GEE | CW-GEE | MMI-GEE | CRA-GEE | A-CRA-GEE | W-GEE | CW-GEE | MMI-GEE | CRA-GEE | A-CRA-GEE | W-GEE | CW-GEE | MMI-GEE |
| 10 | 0.05 | 0 | 89.9 | 83.4 | 91.4 | 91.6 | 97.0 | 92.0 | 84.6 | 92.8 | 92.9 | 97.7 | 93.8 | 86.1 | 95.0 | 94.9 | 98.2 | 92.4 | 84.6 | 98.6 | 98.6 | 97.9 |
| | | 0.1 | 92.1 | 83.3 | 92.8 | 89.9 | 96.7 | 93.4 | 84.7 | 93.8 | 92.5 | 97.6 | 94.7 | 86.2 | 95.0 | 94.0 | 98.1 | 93.5 | 84.7 | 99.0 | 99.0 | 97.6 |
| | | 0.3 | 90.7 | 82.7 | 91.5 | 83.9 | 96.2 | 92.8 | 84.2 | 92.9 | 87.7 | 96.9 | 93.8 | 85.4 | 93.9 | 91.5 | 97.4 | 93.1 | 84.2 | 97.8 | 96.4 | 97.0 |
| | | 0.5 | 91.8 | 81.9 | 91.8 | 76.5 | 97.0 | 93.1 | 84.1 | 93.1 | 83.8 | 97.7 | 94.6 | 85.0 | 94.4 | 88.3 | 98.3 | 93.5 | 84.1 | 98.2 | 92.6 | 97.9 |
| | 0.1 | 0 | 91.5 | 75.6 | 91.4 | 91.6 | 95.8 | 93.0 | 77.5 | 93.3 | 93.2 | 96.3 | 94.3 | 79.3 | 94.6 | 94.7 | 96.9 | 93.8 | 77.4 | 98.5 | 98.5 | 96.6 |
| | | 0.1 | 91.1 | 76.2 | 91.2 | 89.3 | 96.1 | 92.6 | 77.7 | 93.3 | 92.2 | 97.0 | 94.0 | 79.0 | 94.6 | 94.7 | 97.5 | 93.2 | 77.6 | 98.6 | 99.2 | 97.1 |
| | | 0.3 | 91.1 | 74.8 | 91.1 | 85.4 | 95.8 | 92.3 | 76.2 | 92.7 | 89.1 | 96.4 | 94.2 | 78.1 | 94.0 | 92.7 | 97.1 | 92.7 | 76.2 | 98.1 | 98.3 | 96.5 |
| | | 0.5 | 91.8 | 73.8 | 92.1 | 78.2 | 96.9 | 93.2 | 75.4 | 93.2 | 84.6 | 97.6 | 94.6 | 77.5 | 94.7 | 90.7 | 97.8 | 93.3 | 75.4 | 98.3 | 95.9 | 97.6 |
| | 0.2 | 0 | 91.0 | 63.1 | 91.5 | 91.4 | 94.2 | 92.5 | 64.4 | 93.5 | 93.6 | 95.2 | 93.8 | 65.9 | 94.4 | 94.4 | 96.2 | 93.0 | 64.4 | 98.4 | 98.4 | 95.5 |
| | | 0.1 | 90.8 | 63.5 | 91.9 | 89.8 | 94.5 | 93.4 | 64.8 | 93.2 | 91.9 | 95.7 | 94.3 | 65.9 | 94.7 | 93.9 | 96.8 | 94.0 | 64.7 | 98.0 | 98.7 | 95.8 |
| | | 0.3 | 91.6 | 63.3 | 91.6 | 85.1 | 94.5 | 92.8 | 65.1 | 93.1 | 89.7 | 95.5 | 94.0 | 66.5 | 94.3 | 91.9 | 96.4 | 93.2 | 65.1 | 97.9 | 98.0 | 96.2 |
| | | 0.5 | 90.8 | 62.4 | 90.7 | 79.9 | 94.9 | 92.1 | 64.0 | 92.8 | 86.1 | 96.2 | 93.6 | 65.6 | 94.2 | 91.1 | 97.0 | 92.6 | 64.0 | 97.8 | 97.8 | 96.4 |
| 25 | 0.05 | 0 | 93.2 | 85.4 | 93.3 | 93.2 | 96.6 | 93.7 | 86.0 | 93.7 | 93.5 | 97.1 | 94.2 | 86.5 | 94.4 | 94.2 | 97.2 | 93.8 | 86.0 | 95.9 | 96.0 | 97.1 |
| | | 0.1 | 94.0 | 86.0 | 94.3 | 93.8 | 96.5 | 94.4 | 86.7 | 95.0 | 93.9 | 96.7 | 95.0 | 87.5 | 95.8 | 94.5 | 97.2 | 94.5 | 86.7 | 96.9 | 98.5 | 96.8 |
| | | 0.3 | 93.5 | 85.1 | 93.8 | 91.1 | 95.4 | 94.0 | 85.5 | 94.1 | 92.9 | 95.8 | 94.5 | 85.8 | 94.5 | 93.6 | 96.2 | 94.3 | 85.4 | 95.8 | 99.4 | 95.8 |
| | | 0.5 | 92.7 | 84.1 | 93.8 | 87.5 | 95.9 | 93.3 | 84.5 | 94.4 | 89.5 | 96.0 | 94.0 | 85.2 | 94.6 | 92.0 | 96.4 | 93.3 | 84.5 | 95.7 | 99.1 | 96.1 |
| | 0.1 | 0 | 93.3 | 75.6 | 93.6 | 93.7 | 95.4 | 94.1 | 76.4 | 94.1 | 94.2 | 95.8 | 94.3 | 77.2 | 94.6 | 94.6 | 96.1 | 94.2 | 76.4 | 96.4 | 96.5 | 95.9 |
| | | 0.1 | 94.1 | 78.8 | 94.0 | 94.4 | 96.1 | 94.5 | 79.6 | 94.7 | 94.8 | 96.5 | 94.9 | 79.9 | 95.3 | 95.6 | 97.0 | 94.7 | 79.6 | 96.9 | 99.0 | 96.6 |
| | | 0.3 | 93.2 | 77.5 | 93.6 | 90.9 | 95.5 | 94.3 | 78.2 | 94.4 | 92.5 | 95.6 | 94.5 | 78.5 | 95.0 | 94.1 | 96.1 | 94.3 | 78.2 | 96.5 | 99.6 | 95.9 |
| | | 0.5 | 92.8 | 75.8 | 93.6 | 88.3 | 95.2 | 93.8 | 76.5 | 93.8 | 90.8 | 95.9 | 94.4 | 77.2 | 94.4 | 93.4 | 96.1 | 94.2 | 76.5 | 96.0 | 99.4 | 96.0 |
| | 0.2 | 0 | 94.0 | 65.1 | 94.3 | 94.0 | 95.5 | 94.9 | 65.8 | 94.9 | 94.7 | 95.5 | 95.2 | 66.5 | 95.2 | 95.2 | 96.0 | 95.0 | 65.8 | 96.7 | 96.9 | 95.6 |
| | | 0.1 | 93.4 | 62.2 | 93.8 | 93.6 | 94.8 | 94.0 | 63.3 | 94.6 | 94.4 | 95.1 | 94.3 | 63.7 | 95.2 | 94.9 | 95.5 | 94.2 | 63.3 | 96.3 | 98.6 | 95.3 |
| | | 0.3 | 92.5 | 65.1 | 93.0 | 91.5 | 94.4 | 93.2 | 65.6 | 93.4 | 92.7 | 94.7 | 93.8 | 66.3 | 93.9 | 94.2 | 95.3 | 93.3 | 65.6 | 96.2 | 99.2 | 95.1 |
| | | 0.5 | 92.4 | 63.6 | 93.1 | 89.2 | 94.8 | 93.1 | 63.8 | 93.5 | 91.4 | 95.0 | 93.4 | 64.4 | 93.9 | 93.2 | 95.5 | 93.2 | 63.8 | 95.2 | 99.4 | 95.2 |
| 50 | 0.05 | 0 | 93.7 | 87.4 | 95.1 | 95.1 | 95.0 | 94.0 | 87.7 | 95.3 | 95.3 | 95.3 | 94.1 | 87.8 | 95.6 | 95.5 | 95.6 | 94.0 | 87.7 | 96.4 | 96.4 | 95.3 |
| | | 0.1 | 93.5 | 85.2 | 94.6 | 93.7 | 95.5 | 93.7 | 85.3 | 94.6 | 93.8 | 95.9 | 94.2 | 85.4 | 94.8 | 94.1 | 95.9 | 93.7 | 85.3 | 95.6 | 97.2 | 95.9 |
| | | 0.3 | 93.0 | 83.0 | 94.3 | 91.9 | 95.9 | 93.5 | 83.8 | 94.6 | 93.1 | 96.3 | 93.5 | 84.1 | 94.7 | 93.8 | 96.4 | 93.5 | 83.8 | 95.2 | 99.6 | 96.3 |
| | | 0.5 | 93.3 | 83.2 | 93.6 | 90.8 | 95.1 | 93.6 | 83.9 | 93.8 | 91.8 | 95.5 | 93.9 | 84.4 | 94.1 | 92.7 | 95.5 | 93.6 | 83.9 | 94.7 | 100.0 | 95.5 |
| | 0.1 | 0 | 93.9 | 80.1 | 95.1 | 95.0 | 95.6 | 94.1 | 80.1 | 95.2 | 95.3 | 95.9 | 94.3 | 80.3 | 95.5 | 95.4 | 96.1 | 94.2 | 80.1 | 95.9 | 95.9 | 96.0 |
| | | 0.1 | 93.9 | 79.0 | 94.1 | 94.4 | 95.4 | 94.3 | 79.1 | 94.4 | 94.5 | 95.4 | 94.5 | 79.5 | 94.4 | 95.0 | 95.4 | 94.3 | 79.1 | 95.5 | 97.3 | 95.4 |
| | | 0.3 | 93.9 | 77.2 | 94.4 | 92.7 | 96.4 | 94.6 | 77.3 | 94.7 | 93.4 | 96.4 | 94.8 | 77.8 | 94.9 | 94.1 | 96.7 | 94.7 | 77.3 | 95.9 | 99.6 | 96.4 |
| | | 0.5 | 94.2 | 75.8 | 95.2 | 90.9 | 94.9 | 94.5 | 75.9 | 95.5 | 92.3 | 95.2 | 95.0 | 76.2 | 95.7 | 93.4 | 95.5 | 94.7 | 75.9 | 96.0 | 100.0 | 95.3 |
| | 0.2 | 0 | 94.6 | 66.8 | 94.8 | 94.7 | 95.8 | 94.6 | 67.1 | 95.3 | 95.4 | 96.1 | 94.8 | 67.7 | 95.5 | 95.6 | 96.2 | 94.6 | 67.1 | 96.0 | 96.0 | 96.1 |
| | | 0.1 | 94.2 | 65.5 | 94.9 | 94.0 | 95.1 | 94.8 | 65.7 | 95.1 | 94.0 | 95.0 | 94.8 | 66.1 | 95.4 | 94.3 | 95.1 | 94.8 | 65.7 | 95.6 | 96.9 | 95.1 |
| | | 0.3 | 94.6 | 63.8 | 94.6 | 93.0 | 94.8 | 94.9 | 64.0 | 94.8 | 93.6 | 95.0 | 95.1 | 64.4 | 95.0 | 94.0 | 95.2 | 95.0 | 64.0 | 95.5 | 99.5 | 95.0 |
| | | 0.5 | 94.1 | 63.0 | 94.2 | 91.7 | 95.7 | 94.3 | 63.3 | 94.4 | 92.8 | 95.8 | 94.5 | 63.5 | 94.9 | 94.1 | 96.0 | 94.3 | 63.3 | 95.2 | 99.7 | 95.9 |

Note: k= # clusters per arm; ρ_O is the ICC of the (conditional) outcome model (see Eqn. 6 in the manuscript text); ρ_M is the ICC of the probability of missing (POM) model (see Eqn. 7B in the manuscript text). Note that the finite-sample corrections are due to: Kauermann G & Carroll R (2001, JASA 96(456): 1387-1396); Mancl LA & Derouen TA (2001, Biometrics 57(1): 126-134); and Fay & Graubard (2001, Biometrics 57(4):1198-1206), with all details described in Section 2 above.