|  | | **0.05-0.95** | | | **0.1-0.9** | | | **0.2-0.8** | | | **0.3-0.7** | | | **0.4-0.6** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **rBias** | | **MSER** | **rBias** | | **MSER** | **rBias** | | **MSER** | **rBias** | | **MSER** | **rBias** | | **MSER** |
| **type** | **N** | **ML** | **GBIT** | **.** | **ML** | **GBIT** | **.** | **ML** | **GBIT** | **.** | **ML** | **GBIT** | **.** | **ML** | **GBIT** | **.** |
| **I~1** | **200** | 0.000 | 0.000 | 1.143 | 0.003 | 0.000 | **0.266** | 0.038 | -0.001 | **0.040** | 0.110 | -0.002 | **0.016** | 0.192 | -0.005 | **0.022** |
| **500** | 0.000 | 0.000 | **0.718** | 0.003 | 0.000 | **0.122** | 0.038 | 0.000 | **0.014** | 0.110 | -0.001 | **0.006** | 0.192 | -0.003 | **0.007** |
| **1,000** | 0.000 | 0.000 | **0.602** | 0.003 | 0.000 | **0.058** | 0.038 | 0.000 | **0.007** | 0.110 | 0.000 | **0.003** | 0.192 | -0.001 | **0.004** |
| **2,000** | 0.000 | 0.000 | **0.399** | 0.003 | 0.000 | **0.032** | 0.038 | 0.000 | **0.003** | 0.110 | 0.000 | **0.002** | 0.192 | -0.001 | **0.002** |
| **S~1** | **200** | -0.035 | -0.001 | **0.262** | -0.115 | -0.001 | **0.087** | -0.343 | -0.007 | **0.029** | -0.591 | -0.019 | **0.021** | -0.812 | -0.054 | **0.028** |
| **500** | -0.035 | 0.000 | **0.138** | -0.114 | 0.000 | **0.039** | -0.341 | -0.002 | **0.012** | -0.589 | -0.007 | **0.007** | -0.811 | -0.023 | **0.009** |
| **1,000** | -0.035 | 0.000 | **0.079** | -0.115 | -0.001 | **0.020** | -0.342 | -0.001 | **0.005** | -0.590 | -0.004 | **0.004** | -0.811 | -0.013 | **0.004** |
| **2,000** | -0.035 | 0.000 | **0.043** | -0.114 | 0.000 | **0.010** | -0.342 | -0.001 | **0.002** | -0.589 | -0.002 | **0.002** | -0.811 | -0.005 | **0.002** |
| **I~~I** | **200** | 0.069 | -0.006 | **0.224** | 0.074 | -0.015 | **0.710** | -0.112 | -0.032 | **0.905** | -0.481 | -0.066 | **0.125** | -0.847 | -0.121 | **0.114** |
| **500** | 0.071 | -0.002 | **0.082** | 0.075 | -0.007 | **0.322** | -0.109 | -0.014 | **0.650** | -0.480 | -0.028 | **0.044** | -0.846 | -0.060 | **0.040** |
| **1,000** | 0.071 | -0.002 | **0.042** | 0.076 | -0.003 | **0.157** | -0.109 | -0.007 | **0.526** | -0.479 | -0.015 | **0.022** | -0.846 | -0.035 | **0.020** |
| **2,000** | 0.072 | 0.000 | **0.020** | 0.077 | -0.001 | **0.076** | -0.108 | -0.003 | **0.527** | -0.479 | -0.007 | **0.010** | -0.847 | -0.020 | **0.009** |
| **S~~S** | **200** | -0.407 | -0.010 | **0.018** | -0.661 | -0.021 | **0.017** | -0.880 | -0.049 | **0.025** | -0.959 | -0.101 | **0.049** | -0.991 | -0.220 | **0.120** |
| **500** | -0.409 | -0.005 | **0.007** | -0.660 | -0.007 | **0.006** | -0.880 | -0.019 | **0.010** | -0.959 | -0.045 | **0.018** | -0.991 | -0.102 | **0.044** |
| **1,000** | -0.408 | -0.002 | **0.004** | -0.661 | -0.004 | **0.003** | -0.881 | -0.010 | **0.004** | -0.960 | -0.023 | **0.008** | -0.991 | -0.056 | **0.020** |
| **2,000** | -0.408 | -0.002 | **0.002** | -0.660 | -0.002 | **0.002** | -0.881 | -0.004 | **0.002** | -0.959 | -0.012 | **0.004** | -0.991 | -0.029 | **0.009** |
| **I~~S** | **200** | -0.345 | -0.011 | **0.020** | -0.633 | -0.031 | **0.019** | -0.936 | -0.085 | **0.030** | -1.022 | -0.169 | **0.068** | -1.014 | -0.380 | **0.234** |
| **500** | -0.347 | -0.006 | **0.008** | -0.631 | -0.012 | **0.006** | -0.935 | -0.035 | **0.009** | -1.022 | -0.077 | **0.020** | -1.013 | -0.177 | **0.070** |
| **1,000** | -0.345 | -0.002 | **0.004** | -0.631 | -0.007 | **0.003** | -0.935 | -0.018 | **0.004** | -1.022 | -0.037 | **0.008** | -1.013 | -0.097 | **0.027** |
| **2,000** | -0.346 | -0.002 | **0.002** | -0.631 | -0.003 | **0.001** | -0.934 | -0.009 | **0.002** | -1.022 | -0.020 | **0.004** | -1.013 | -0.052 | **0.010** |
| Note. N: sample size; GBIT: generalized tobit estimator; ML: ML estimator with censored data; Number of timepoints and ICC were averaged | | | | | | | | | | | | | | | | |

|  | | **0.05-0.95** | | | **0.1-0.9** | | | **0.2-0.8** | | | **0.3-0.7** | | | **0.4-0.6** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **rBias** | | **MSER** | **rBias** | | **MSER** | **rBias** | | **MSER** | **rBias** | | **MSER** | **rBias** | | **MSER** |
| **type** | **N** | **ML** | **GBIT** | **.** | **ML** | **GBIT** | **.** | **ML** | **GBIT** | **.** | **ML** | **GBIT** | **.** | **ML** | **GBIT** | **.** |
| **I~x1.cov** | **200** | 0.072 | -0.003 | **0.032** | 0.103 | -0.009 | **0.068** | 0.018 | -0.024 | **0.597** | -0.208 | -0.054 | **0.349** | -0.541 | -0.136 | **0.176** |
| **500** | 0.072 | -0.001 | **0.012** | 0.103 | -0.004 | **0.022** | 0.018 | -0.010 | **0.242** | -0.210 | -0.022 | **0.096** | -0.539 | -0.059 | **0.045** |
| **1,000** | 0.072 | 0.000 | **0.006** | 0.103 | -0.002 | **0.011** | 0.017 | -0.005 | **0.130** | -0.210 | -0.011 | **0.037** | -0.540 | -0.032 | **0.017** |
| **2,000** | 0.072 | 0.000 | **0.003** | 0.103 | -0.001 | **0.005** | 0.018 | -0.002 | **0.064** | -0.211 | -0.006 | **0.017** | -0.539 | -0.017 | **0.007** |
| **S~x1.cov** | **200** | -0.234 | -0.003 | **0.016** | -0.441 | -0.009 | **0.012** | -0.722 | -0.025 | **0.013** | -0.887 | -0.059 | **0.022** | -0.976 | -0.158 | **0.063** |
| **500** | -0.237 | -0.002 | **0.006** | -0.441 | -0.003 | **0.005** | -0.723 | -0.011 | **0.005** | -0.887 | -0.026 | **0.007** | -0.977 | -0.066 | **0.018** |
| **1,000** | -0.236 | 0.000 | **0.003** | -0.441 | -0.002 | **0.002** | -0.723 | -0.005 | **0.002** | -0.887 | -0.013 | **0.003** | -0.977 | -0.034 | **0.007** |
| **2,000** | -0.237 | 0.000 | **0.002** | -0.441 | -0.001 | **0.001** | -0.723 | -0.002 | **0.001** | -0.887 | -0.007 | **0.002** | -0.977 | -0.018 | **0.003** |
| **z1~I.cov** | **200** | 0.049 | 0.000 | **0.029** | 0.107 | 0.000 | **0.015** | 0.160 | -0.001 | **0.023** | 0.074 | 0.000 | **0.102** | 0.041 | -0.001 | **0.104** |
| **500** | 0.050 | 0.000 | **0.013** | 0.106 | 0.000 | **0.006** | 0.157 | 0.000 | **0.012** | 0.054 | -0.001 | **0.105** | 0.035 | 0.000 | **0.092** |
| **1,000** | 0.049 | 0.000 | **0.006** | 0.106 | 0.000 | **0.003** | 0.156 | 0.000 | **0.006** | 0.053 | 0.000 | **0.094** | 0.016 | -0.001 | **0.083** |
| **2,000** | 0.049 | 0.000 | **0.003** | 0.106 | 0.000 | **0.002** | 0.155 | 0.000 | **0.003** | 0.050 | 0.000 | **0.082** | -0.002 | 0.000 | **0.072** |
| **z1~S.cov** | **200** | 0.516 | 0.001 | **0.013** | 1.300 | -0.001 | **0.005** | 3.369 | -0.005 | **0.002** | 5.526 | 0.003 | **0.002** | 14.633 | 0.010 | **0.001** |
| **500** | 0.522 | 0.002 | **0.005** | 1.291 | -0.002 | **0.002** | 3.320 | -0.002 | **0.001** | 5.082 | 0.001 | **0.001** | 14.183 | 0.007 | **0.000** |
| **1,000** | 0.519 | 0.000 | **0.003** | 1.288 | 0.000 | **0.001** | 3.303 | -0.001 | **0.000** | 5.036 | 0.002 | **0.000** | 13.209 | 0.000 | **0.000** |
| **2,000** | 0.519 | 0.000 | **0.001** | 1.286 | 0.000 | **0.000** | 3.293 | -0.001 | **0.000** | 4.966 | 0.000 | **0.000** | 12.221 | 0.000 | **0.000** |
| Note. N: sample size; GBIT: generalized tobit estimator; ML: ML estimator with censored data; Number of timepoints and ICC were averaged | | | | | | | | | | | | | | | | |