Table A1. Continuous outcome (M=500)

a. linear f(x) with true ATE = ?

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | One stage MLE | | | Two stage MLE | | | Two stage Bayesian | | |
|  | Bias | Avg SE | Coverage | Bias | Avg SE | Coverage | Bias | Avg SE | Coverage |
| NLR (n=100) |  |  |  |  |  |  |  |  |  |
| LR (n=100) |  |  |  |  |  |  |  |  |  |
| All (n=100) |  |  |  |  |  |  |  |  |  |
| NLR (n=200) |  |  |  |  |  |  |  |  |  |
| LR (n=200) |  |  |  |  |  |  |  |  |  |
| All (n=200) |  |  |  |  |  |  |  |  |  |

b. complex f(x) with true ATE = ?

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | One stage MLE | | | Two stage MLE | | | Two stage Bayesian | | |
|  | Bias | Avg SE | Coverage | Bias | Avg SE | Coverage | Bias | Avg SE | Coverage |
| NLR (n=100) |  |  |  |  |  |  |  |  |  |
| LR (n=100) |  |  |  |  |  |  |  |  |  |
| All (n=100) |  |  |  |  |  |  |  |  |  |
| NLR (n=200) |  |  |  |  |  |  |  |  |  |
| LR (n=200) |  |  |  |  |  |  |  |  |  |
| All (n=200) |  |  |  |  |  |  |  |  |  |

Table A2. Binary outcome (M=500)

a. linear f(x) with true ATE = ?

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | One stage MLE | | | Two stage MLE | | | Two stage Bayesian | | |
|  | Bias | Avg SE | Coverage | Bias | Avg SE | Coverage | Bias | Avg SE | Coverage |
| NLR (n=100) |  |  |  |  |  |  |  |  |  |
| LR (n=100) |  |  |  |  |  |  |  |  |  |
| All (n=100) |  |  |  |  |  |  |  |  |  |
| NLR (n=200) |  |  |  |  |  |  |  |  |  |
| LR (n=200) |  |  |  |  |  |  |  |  |  |
| All (n=200) |  |  |  |  |  |  |  |  |  |

b. complex f(x) with true ATE = ?

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | One stage MLE | | | Two stage MLE | | | Two stage Bayesian | | |
|  | Bias | Avg SE | Coverage | Bias | Avg SE | Coverage | Bias | Avg SE | Coverage |
| NLR (n=100) |  |  |  |  |  |  |  |  |  |
| LR (n=100) |  |  |  |  |  |  |  |  |  |
| All (n=100) |  |  |  |  |  |  |  |  |  |
| NLR (n=200) |  |  |  |  |  |  |  |  |  |
| LR (n=200) |  |  |  |  |  |  |  |  |  |
| All (n=200) |  |  |  |  |  |  |  |  |  |