# Supplementay Materials for "Prediction-Driven Pooled Testing Methods: Application to HIV Treatment Monitoring in Kalisizo, Uganda"

Adam Brand[1] | Susanne May[2] | Steven Reynolds[4,5,6] | Gertrude Nakigozi[7] | James P. Hughes[2] | David Smith[3] | Erin E. Gabriel[1]

[1]Department of Medical Epidemiology and Biostatistics, Karolinska Institute, Sweden

[2]Department of Biostatistics, University of Washington, Seattle, Washington, USA

[3], , San Diego, California, USA

[4]Johns Hopkins University, School of Medicine, Baltimore, MD, USA

[5]Division of Intramural Research, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, USA

[6]Makerere University, School of Public Health, Kampala, Uganda

[7] Rakai Health Sciences Program, Kalisizo, Uganda

**Correspondence**
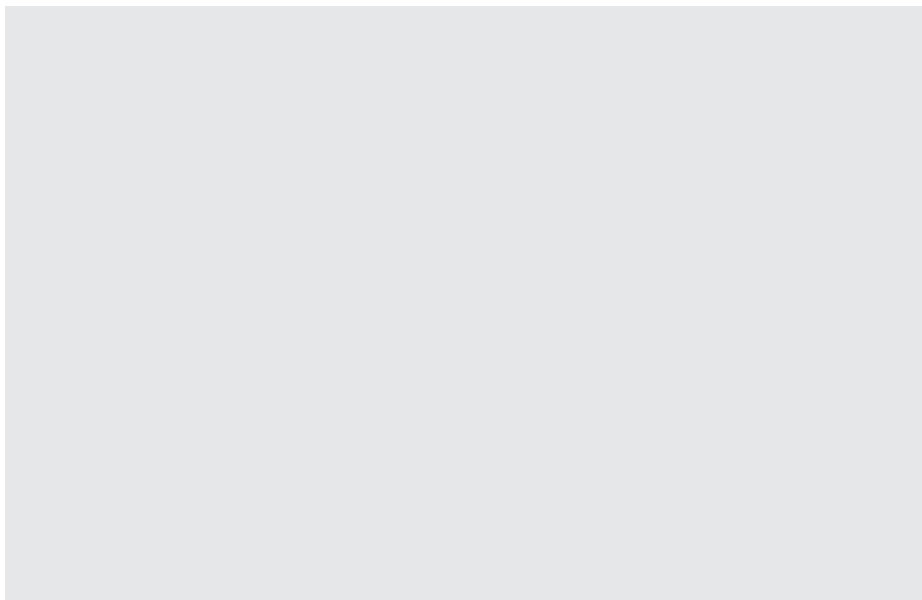
*Adam Brand, Email: adam.brand@ki.se

**TABLE S1** AGAIG, SD=0, ME=0, est betas

| | | Linreg | MSS | LRSOE | MiniCov | Mini |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | 94.4% (93.5%, 95.2%) | 94.7% (93.8%, 95.5%) | 97.7% (97.1%, 98.2%) | 100% (99.9%, 100%) | 100% (99.9%, 100%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 74% (73.6%, 74.4%) | 69.9% (69.5%, 70.3%) | 71.2% (70.8%, 71.6%) | 83.3% (83%, 83.6%) | 60.3% (59.9%, 60.7%) |
| | Median (Q1, Q3) | 74% (72%, 76%) | 71% (67%, 73%) | 71% (69%, 74%) | 84% (82%, 85%) | 61% (52%, 69%) |
| | Min, Max | 67%, 79% | 52%, 79% | 59%, 79% | 76%, 89% | 28%, 86% |
| Rounds | | | | | | |
| | Mean (95% CI) | 3.1 (3, 3.1) | 3.7 (3.6, 3.8) | 2.3 (2.2, 2.3) | 3 (2.9, 3.1) | 9.9 (9.7, 10) |
| | Median (Q1, Q3) | 3 (3, 4) | 4 (3, 4) | 2 (2, 3) | 3 (3, 3) | 10 (9, 11) |
| | Min, Max | 2, 6 | 2, 7 | 2, 3 | 2, 5 | 3, 11 |

**TABLE S2** AGAIG, SD=0, ME=0.25, est betas

| | | Linreg | MSS | LRSOE | MiniCov | Mini |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | 69.5% (67.9%, 71.1%) | 68.5% (66.9%, 70.2%) | 75.9% (74.4%, 77.4%) | 79.2% (77.8%, 80.6%) | 80.5% (79.1%, 81.9%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 70.8% (70.4%, 71.2%) | 67% (66.5%, 67.4%) | 69% (68.6%, 69.4%) | 70.3% (69.9%, 70.7%) | 56.7% (56.3%, 57.1%) |
| | Median (Q1, Q3) | 73.5% (68%, 77%) | 70% (63%, 74%) | 71% (66%, 74%) | 76% (59%, 86%) | 60% (44%, 71%) |
| | Min, Max | 22%, 80% | 23%, 80% | 26%, 80% | 0%, 90% | 0%, 90% |
| Rounds | | | | | | |
| | Mean (95% CI) | 4.6 (4.3, 4.8) | 4.2 (4, 4.4) | 2.7 (2.6, 2.8) | 7.2 (6.8, 7.5) | 9.9 (9.7, 10) |
| | Median (Q1, Q3) | 4 (2, 6) | 4 (3, 5) | 2 (2, 3) | 11 (2, 11) | 11 (9, 11) |
| | Min, Max | 1, 16 | 1, 14 | 1, 8 | 1, 11 | 1, 11 |

**TABLE S3** AGAIG, SD=0, ME=0.5, est betas

| | | Linreg | MSS | LRSOE | MiniCov | Mini |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | 54% (52.2%, 55.8%) | 53.2% (51.4%, 55%) | 60.9% (59.1%, 62.6%) | 69.1% (67.4%, 70.8%) | 69.7% (68.1%, 71.4%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 70% (69.6%, 70.4%) | 67.3% (66.9%, 67.7%) | 68.2% (67.8%, 68.6%) | 66.2% (65.8%, 66.6%) | 56.3% (55.8%, 56.7%) |
| | Median (Q1, Q3) | 75% (67%, 78%) | 72% (62.8%, 75%) | 71% (65%, 75%) | 76% (49%, 87%) | 60% (40%, 77%) |
| | Min, Max | 7%, 80% | 4%, 80% | 7%, 80% | -10%, 90% | -10%, 90% |
| Rounds | | | | | | |
| | Mean (95% CI) | 4.8 (4.5, 5.1) | 4.1 (3.9, 4.4) | 2.8 (2.7, 3) | 7.3 (6.9, 7.6) | 9.4 (9.2, 9.7) |
| | Median (Q1, Q3) | 4 (2, 7) | 3 (2, 6) | 2 (2, 3) | 11 (2, 11) | 11 (9, 11) |
| | Min, Max | 1, 20 | 1, 17 | 1, 9 | 1, 11 | 1, 11 |

**TABLE S4** AGAIG, SD=0, ME=0.75, est betas

| | | Linreg | MSS | LRSOE | MiniCov | Mini |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | 43.9% (42.1%, 45.6%) | 43.6% (41.8%, 45.4%) | 49.3% (47.5%, 51%) | 62.1% (60.4%, 63.8%) | 62.3% (60.6%, 64%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 69.6% (69.2%, 70%) | 67.6% (67.2%, 68%) | 68% (67.6%, 68.4%) | 64% (63.5%, 64.4%) | 55.9% (55.4%, 56.3%) |
| | Median (Q1, Q3) | 76% (65%, 79%) | 74% (62%, 78%) | 72% (64%, 78%) | 76% (45.8%, 88%) | 61% (35.8%, 81%) |
| | Min, Max | -2%, 80% | -4%, 80% | -2%, 80% | -10%, 90% | -10%, 90% |
| Rounds | | | | | | |
| | Mean (95% CI) | 4.9 (4.5, 5.2) | 4 (3.7, 4.3) | 2.8 (2.6, 2.9) | 7.1 (6.7, 7.5) | 8.8 (8.5, 9.1) |
| | Median (Q1, Q3) | 3 (2, 7) | 3 (2, 6) | 2 (2, 4) | 11 (2, 11) | 11 (7, 11) |
| | Min, Max | 1, 24 | 1, 19 | 1, 10 | 1, 11 | 1, 11 |

**TABLE S5** AGAIG, SD=1.0, ME=0.05, est betas

| | Linreg | MSS | LRSOE | MiniCov | Mini |
|---|---|---|---|---|---|
| **Sensitivity** | | | | | |
| Mean (95% CI) | 90.9% (89.8%, 91.9%) | 89.1% (87.9%, 90.2%) | 94.7% (93.8%, 95.5%) | 95.8% (95%, 96.5%) | 96.2% (95.5%, 96.9%) |
| **Efficiency** | | | | | |
| Mean (95% CI) | 70.9% (70.5%, 71.3%) | 68.3% (67.8%, 68.7%) | 69.3% (68.9%, 69.7%) | 72% (71.7%, 72.4%) | 58% (57.5%, 58.4%) |
| Median (Q1, Q3) | 72% (68%, 75%) | 70% (64%, 73%) | 70% (67%, 73%) | 75% (65%, 81%) | 58% (50%, 67%) |
| Min, Max | 39%, 80% | 34%, 80% | 48%, 80% | 28%, 89% | -5%, 89% |
| **Rounds** | | | | | |
| Mean (95% CI) | 4.4 (4.3, 4.6) | 4 (3.9, 4.1) | 2.7 (2.6, 2.7) | 8 (7.7, 8.3) | 10.1 (10, 10.3) |
| Median (Q1, Q3) | 4 (3, 6) | 4 (3, 5) | 2.5 (2, 3) | 10 (4, 11) | 11 (10, 11) |
| Min, Max | 1, 12 | 1, 11 | 1, 5 | 2, 11 | 2, 11 |

**TABLE S6** AGAIG, SD=1.0, ME=0.12, est betas

| | Linreg | MSS | LRSOE | MiniCov | Mini |
|---|---|---|---|---|---|
| **Sensitivity** | | | | | |
| Mean (95% CI) | 86.4% (85.1%, 87.6%) | 83.3% (81.9%, 84.7%) | 91.2% (90.1%, 92.2%) | 91.7% (90.6%, 92.6%) | 92.4% (91.4%, 93.4%) |
| **Efficiency** | | | | | |
| Mean (95% CI) | 69.6% (69.2%, 70%) | 67.5% (67.1%, 67.9%) | 68.5% (68.1%, 68.9%) | 68.7% (68.3%, 69.1%) | 56.2% (55.8%, 56.7%) |
| Median (Q1, Q3) | 72% (65%, 75%) | 69% (63%, 73%) | 70% (65%, 73%) | 72.5% (59%, 82%) | 57% (46%, 67%) |
| Min, Max | 37%, 80% | 34%, 80% | 41%, 80% | 9%, 89% | -7%, 89% |
| **Rounds** | | | | | |
| Mean (95% CI) | 4.9 (4.7, 5.1) | 4.2 (4.1, 4.4) | 2.8 (2.8, 2.9) | 8.2 (7.9, 8.5) | 10.2 (10, 10.3) |
| Median (Q1, Q3) | 4 (3, 7) | 4 (3, 5) | 3 (2, 3) | 11 (4, 11) | 11 (10, 11) |
| Min, Max | 1, 13 | 1, 11 | 1, 6 | 2, 11 | 2, 11 |

**TABLE S7** AGAIG, SD=1.0, ME=0.25, est betas

| | | Linreg | MSS | LRSOE | MiniCov | Mini |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | 76.8% (75.3%, 78.3%) | 73.8% (72.1%, 75.3%) | 81.8% (80.3%, 83.1%) | 84.5% (83.1%, 85.7%) | 84.8% (83.4%, 86%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 68.6% (68.2%, 69%) | 66.6% (66.2%, 67.1%) | 67.3% (66.9%, 67.7%) | 64.6% (64.1%, 65%) | 54.2% (53.7%, 54.6%) |
| | Median (Q1, Q3) | 72% (63%, 76%) | 69% (61%, 74%) | 70% (63%, 73%) | 69% (51.8%, 82%) | 57% (42%, 68%) |
| | Min, Max | 24%, 80% | 23%, 80% | 23%, 80% | -6%, 89% | -9%, 89% |
| Rounds | | | | | | |
| | Mean (95% CI) | 5.4 (5.1, 5.6) | 4.4 (4.2, 4.6) | 3 (2.9, 3.1) | 8.4 (8, 8.7) | 10 (9.9, 10.2) |
| | Median (Q1, Q3) | 5 (3, 7) | 4 (3, 6) | 3 (2, 4) | 11 (4, 11) | 11 (10, 11) |
| | Min, Max | 1, 18 | 1, 14 | 1, 8 | 2, 11 | 2, 11 |

**TABLE S8** AGAIG, SD=1.0, ME=0.5, est betas

| | | Linreg | MSS | LRSOE | MiniCov | Mini |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | 58.3% (56.6%, 60%) | 56.7% (55%, 58.4%) | 63.3% (61.6%, 64.9%) | 70.9% (69.3%, 72.4%) | 71.3% (69.8%, 72.9%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 67.3% (66.8%, 67.7%) | 65.5% (65.1%, 65.9%) | 65.3% (64.9%, 65.7%) | 60.5% (60.1%, 61%) | 52.1% (51.6%, 52.5%) |
| | Median (Q1, Q3) | 72% (61%, 78%) | 70% (60%, 75%) | 69% (60%, 74%) | 68% (43%, 85%) | 57% (35%, 72%) |
| | Min, Max | -5%, 80% | -3%, 80% | -2%, 80% | -10%, 90% | -10%, 90% |
| Rounds | | | | | | |
| | Mean (95% CI) | 5.9 (5.5, 6.2) | 4.6 (4.3, 4.8) | 3.2 (3, 3.3) | 8.1 (7.8, 8.5) | 9.8 (9.6, 10) |
| | Median (Q1, Q3) | 5 (2, 9) | 4 (2, 6) | 3 (2, 4) | 11 (3, 11) | 11 (9, 11) |
| | Min, Max | 1, 22 | 1, 18 | 1, 10 | 1, 11 | 1, 11 |

**TABLE S9** Reverse, SD=0, ME=0, est betas

|  |  | Linreg | MSS | LRSOE | MiniCov | Mini |
|---|---|---|---|---|---|---|
| Sensitivity |  |  |  |  |  |  |
|  | Mean (95% CI) | 94.7% (93.8%, 95.5%) | 94.7% (93.8%, 95.5%) | 96.2% (95.5%, 96.9%) | 100% (99.9%, 100%) | 100% (99.9%, 100%) |
| Efficiency |  |  |  |  |  |  |
|  | Mean (95% CI) | 64.7% (64.3%, 65.1%) | 69.9% (69.5%, 70.3%) | 62.3% (61.9%, 62.7%) | 40.8% (40.4%, 41.2%) | 60.3% (59.9%, 60.7%) |
|  | Median (Q1, Q3) | 65% (59%, 71%) | 71% (67%, 73%) | 64% (56%, 70%) | 40% (30%, 50%) | 61% (52%, 69%) |
|  | Min, Max | 37%, 79% | 52%, 79% | 24%, 79% | 0%, 80% | 28%, 86% |
| Rounds |  |  |  |  |  |  |
|  | Mean (95% CI) | 5.5 (5.3, 5.6) | 3.7 (3.6, 3.8) | 3.8 (3.7, 3.9) | 11 (11, 11) | 9.9 (9.7, 10) |
|  | Median (Q1, Q3) | 5 (4, 6) | 4 (3, 4) | 4 (3, 4) | 11 (11, 11) | 10 (9, 11) |
|  | Min, Max | 2, 11 | 2, 7 | 2, 7 | 10, 11 | 3, 11 |

**TABLE S10** Reverse, SD=0, ME=0.25, est betas

|  |  | Linreg | MSS | LRSOE | MiniCov | Mini |
|---|---|---|---|---|---|---|
| Sensitivity |  |  |  |  |  |  |
|  | Mean (95% CI) | 67.5% (65.8%, 69.2%) | 68.5% (66.9%, 70.2%) | 71.3% (69.7%, 72.9%) | 82.3% (80.9%, 83.7%) | 80.5% (79.1%, 81.9%) |
| Efficiency |  |  |  |  |  |  |
|  | Mean (95% CI) | 64.9% (64.5%, 65.3%) | 67% (66.5%, 67.4%) | 61.6% (61.2%, 62.1%) | 42% (41.6%, 42.4%) | 56.7% (56.3%, 57.1%) |
|  | Median (Q1, Q3) | 67% (58%, 74%) | 70% (63%, 74%) | 64% (54%, 72%) | 41% (30%, 53%) | 60% (44%, 71%) |
|  | Min, Max | 16%, 80% | 23%, 80% | 8%, 80% | 0%, 90% | 0%, 90% |
| Rounds |  |  |  |  |  |  |
|  | Mean (95% CI) | 5.9 (5.6, 6.1) | 4.2 (4, 4.4) | 3.9 (3.7, 4) | 10.9 (10.9, 11) | 9.9 (9.7, 10) |
|  | Median (Q1, Q3) | 6 (4, 7) | 4 (3, 5) | 4 (3, 5) | 11 (11, 11) | 11 (9, 11) |
|  | Min, Max | 1, 17 | 1, 14 | 1, 8 | 1, 11 | 1, 11 |

**TABLE S11** Reverse, SD=0, ME=0.5, est betas

| | | Linreg | MSS | LRSOE | MiniCov | Mini |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | 51.9% (50.1%, 53.7%) | 53.2% (51.4%, 55%) | 57% (55.2%, 58.8%) | 70.1% (68.5%, 71.8%) | 69.7% (68.1%, 71.4%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 66.3% (65.8%, 66.7%) | 67.3% (66.9%, 67.7%) | 62.9% (62.5%, 63.4%) | 45.2% (44.7%, 45.6%) | 56.3% (55.8%, 56.7%) |
| | Median (Q1, Q3) | 71% (59%, 77%) | 72% (62.8%, 75%) | 67% (55%, 74%) | 42% (30%, 64.2%) | 60% (40%, 77%) |
| | Min, Max | 5%, 80% | 4%, 80% | -2%, 80% | -10%, 90% | -10%, 90% |
| Rounds | | | | | | |
| | Mean (95% CI) | 5.6 (5.3, 6) | 4.1 (3.9, 4.4) | 3.6 (3.4, 3.7) | 10.5 (10.3, 10.7) | 9.4 (9.2, 9.7) |
| | Median (Q1, Q3) | 5 (3, 8) | 3 (2, 6) | 3 (2, 5) | 11 (11, 11) | 11 (9, 11) |
| | Min, Max | 1, 21 | 1, 17 | 1, 9 | 1, 11 | 1, 11 |

**TABLE S12** Reverse, SD=0, ME=0.75, est betas

| | | Linreg | MSS | LRSOE | MiniCov | Mini |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | 41.9% (40.2%, 43.7%) | 43.6% (41.8%, 45.4%) | 45.7% (43.9%, 47.5%) | 62% (60.2%, 63.7%) | 62.3% (60.6%, 64%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 66.9% (66.5%, 67.3%) | 67.6% (67.2%, 68%) | 63.8% (63.4%, 64.2%) | 46.6% (46.1%, 47%) | 55.9% (55.4%, 56.3%) |
| | Median (Q1, Q3) | 74% (59%, 79%) | 74% (62%, 78%) | 70% (55%, 78%) | 43.5% (22.8%, 72%) | 61% (35.8%, 81%) |
| | Min, Max | -5%, 80% | -4%, 80% | -6%, 80% | -10%, 90% | -10%, 90% |
| Rounds | | | | | | |
| | Mean (95% CI) | 5.4 (5, 5.8) | 4 (3.7, 4.3) | 3.3 (3.1, 3.5) | 9.7 (9.5, 10) | 8.8 (8.5, 9.1) |
| | Median (Q1, Q3) | 4 (2, 8) | 3 (2, 6) | 3 (2, 5) | 11 (11, 11) | 11 (7, 11) |
| | Min, Max | 1, 25 | 1, 19 | 1, 9 | 1, 11 | 1, 11 |

**TABLE S13** Reverse, SD=1.0, ME=0.05, est betas

| | Linreg | MSS | LRSOE | MiniCov | Mini |
|---|---|---|---|---|---|
| Sensitivity | | | | | |
| Mean (95% CI) | 89.6% (88.5%, 90.7%) | 89.1% (87.9%, 90.2%) | 92.1% (91%, 93%) | 96.8% (96.1%, 97.4%) | 96.2% (95.5%, 96.9%) |
| Efficiency | | | | | |
| Mean (95% CI) | 64.2% (63.8%, 64.6%) | 68.3% (67.8%, 68.7%) | 62.1% (61.7%, 62.5%) | 44.1% (43.7%, 44.5%) | 58% (57.5%, 58.4%) |
| Median (Q1, Q3) | 66% (59%, 70%) | 70% (64%, 73%) | 64% (56%, 69%) | 45% (34%, 53%) | 58% (50%, 67%) |
| Min, Max | 34%, 80% | 34%, 80% | 24%, 80% | -6%, 82% | -5%, 89% |
| Rounds | | | | | |
| Mean (95% CI) | 6 (5.8, 6.1) | 4 (3.9, 4.1) | 3.9 (3.8, 4) | 11 (11, 11) | 10.1 (10, 10.3) |
| Median (Q1, Q3) | 6 (5, 7) | 4 (3, 5) | 4 (3, 5) | 11 (11, 11) | 11 (10, 11) |
| Min, Max | 1, 13 | 1, 11 | 1, 7 | 9, 11 | 2, 11 |

**TABLE S14** Reverse, SD=1.0, ME=0.12, est betas

| | Linreg | MSS | LRSOE | MiniCov | Mini |
|---|---|---|---|---|---|
| Sensitivity | | | | | |
| Mean (95% CI) | 84.2% (82.9%, 85.6%) | 83.3% (81.9%, 84.7%) | 86.8% (85.5%, 88%) | 92.7% (91.7%, 93.7%) | 92.4% (91.4%, 93.4%) |
| Efficiency | | | | | |
| Mean (95% CI) | 63.8% (63.4%, 64.2%) | 67.5% (67.1%, 67.9%) | 61.8% (61.4%, 62.2%) | 43.9% (43.4%, 44.3%) | 56.2% (55.8%, 56.7%) |
| Median (Q1, Q3) | 66% (58%, 71%) | 69% (63%, 73%) | 64% (56%, 70%) | 45% (32.8%, 53%) | 57% (46%, 67%) |
| Min, Max | 30%, 80% | 34%, 80% | 25%, 80% | -7%, 82% | -7%, 89% |
| Rounds | | | | | |
| Mean (95% CI) | 6.2 (6, 6.4) | 4.2 (4.1, 4.4) | 4 (3.9, 4.1) | 11 (11, 11) | 10.2 (10, 10.3) |
| Median (Q1, Q3) | 6 (5, 8) | 4 (3, 5) | 4 (3, 5) | 11 (11, 11) | 11 (10, 11) |
| Min, Max | 1, 14 | 1, 11 | 1, 7 | 9, 11 | 2, 11 |

**TABLE S15** Reverse, SD=1.0, ME=0.25, est betas

| | Linreg | MSS | LRSOE | MiniCov | Mini |
|---|---|---|---|---|---|
| Sensitivity | | | | | |
| Mean (95% CI) | 74.3% (72.7%, 75.9%) | 73.8% (72.1%, 75.3%) | 78.1% (76.5%, 79.5%) | 84.9% (83.6%, 86.2%) | 84.8% (83.4%, 86%) |
| Efficiency | | | | | |
| Mean (95% CI) | 63.8% (63.4%, 64.3%) | 66.6% (66.2%, 67.1%) | 61.2% (60.8%, 61.6%) | 43.4% (43%, 43.8%) | 54.2% (53.7%, 54.6%) |
| Median (Q1, Q3) | 66% (57%, 72%) | 69% (61%, 74%) | 63% (54%, 70%) | 44% (32%, 55%) | 57% (42%, 68%) |
| Min, Max | 21%, 80% | 23%, 80% | 16%, 80% | -10%, 86% | -9%, 89% |
| Rounds | | | | | |
| Mean (95% CI) | 6.4 (6.2, 6.7) | 4.4 (4.2, 4.6) | 3.9 (3.8, 4.1) | 10.9 (10.9, 11) | 10 (9.9, 10.2) |
| Median (Q1, Q3) | 6 (4, 8) | 4 (3, 6) | 4 (3, 5) | 11 (11, 11) | 11 (10, 11) |
| Min, Max | 1, 17 | 1, 14 | 1, 8 | 5, 11 | 2, 11 |

**TABLE S16** Reverse, SD=1.0, ME=0.5, est betas

| | Linreg | MSS | LRSOE | MiniCov | Mini |
|---|---|---|---|---|---|
| Sensitivity | | | | | |
| Mean (95% CI) | 56.9% (55.2%, 58.6%) | 56.7% (55%, 58.4%) | 60.4% (58.8%, 62.1%) | 71.9% (70.4%, 73.4%) | 71.3% (69.8%, 72.9%) |
| Efficiency | | | | | |
| Mean (95% CI) | 64% (63.6%, 64.4%) | 65.5% (65.1%, 65.9%) | 60.6% (60.2%, 61%) | 43.4% (42.9%, 43.8%) | 52.1% (51.6%, 52.5%) |
| Median (Q1, Q3) | 68% (56%, 76%) | 70% (60%, 75%) | 64% (52%, 73%) | 47% (25%, 61%) | 57% (35%, 72%) |
| Min, Max | -4%, 80% | -3%, 80% | -7%, 80% | -10%, 90% | -10%, 90% |
| Rounds | | | | | |
| Mean (95% CI) | 6.6 (6.2, 7) | 4.6 (4.3, 4.8) | 3.8 (3.6, 3.9) | 10.7 (10.6, 10.8) | 9.8 (9.6, 10) |
| Median (Q1, Q3) | 6 (3, 9) | 4 (2, 6) | 3.5 (2, 5) | 11 (11, 11) | 11 (9, 11) |
| Min, Max | 1, 23 | 1, 18 | 1, 11 | 1, 11 | 1, 11 |

**TABLE S17** Hypred Mid Tier, AGAIG, SD=0 ME=0, Estimated Betas

| | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|
| Sensitivity | | | | | |
| Mean (95% CI) | NaN% (0%, 100%) | NaN% (0%, 100%) | NaN% (0%, 100%) | NaN% (0%, 100%) | NaN% (0%, 100%) |
| Efficiency | | | | | |
| Mean (95% CI) | 80% (79.4%, 80.6%) | 80% (79.4%, 80.6%) | 80% (79.4%, 80.6%) | 90% (89.5%, 90.5%) | 90% (89.5%, 90.5%) |
| Median (Q1, Q3) | 80% (80%, 80%) | 80% (80%, 80%) | 80% (80%, 80%) | 90% (90%, 90%) | 90% (90%, 90%) |
| Min, Max | 80%, 80% | 80%, 80% | 80%, 80% | 90%, 90% | 90%, 90% |
| Rounds | | | | | |
| Mean (95% CI) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) |
| Median (Q1, Q3) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) |
| Min, Max | 1, 1 | 1, 1 | 1, 1 | 1, 1 | 1, 1 |

**TABLE S18** Hypred Mid Tier, AGAIG, SD=0 ME=0.25, Estimated betas

| | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|
| Sensitivity | | | | | |
| Mean (95% CI) | NaN% (0%, 100%) | NaN% (0%, 100%) | NaN% (0%, 100%) | NaN% (0%, 100%) | NaN% (0%, 100%) |
| Efficiency | | | | | |
| Mean (95% CI) | 80% (79.4%, 80.6%) | 80% (79.4%, 80.6%) | 80% (79.4%, 80.6%) | 90% (89.5%, 90.5%) | 90% (89.5%, 90.5%) |
| Median (Q1, Q3) | 80% (80%, 80%) | 80% (80%, 80%) | 80% (80%, 80%) | 90% (90%, 90%) | 90% (90%, 90%) |
| Min, Max | 80%, 80% | 80%, 80% | 80%, 80% | 90%, 90% | 90%, 90% |
| Rounds | | | | | |
| Mean (95% CI) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) |
| Median (Q1, Q3) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) |
| Min, Max | 1, 1 | 1, 1 | 1, 1 | 1, 1 | 1, 1 |

**TABLE S19** Hypred Mid Tier, AGAIG, SD=0 ME=0.5, Estimated betas

|  | | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
|  | Mean (95% CI) | 0% (0%, 41%) | 0% (0%, 41%) | 0% (0%, 41%) | 0% (0%, 41%) | 0% (0%, 41%) |
| Efficiency | | | | | | |
|  | Mean (95% CI) | 80% (79.4%, 80.6%) | 80% (79.4%, 80.6%) | 80% (79.4%, 80.6%) | 87.9% (87.4%, 88.5%) | 87.8% (87.3%, 88.3%) |
|  | Median (Q1, Q3) | 80% (80%, 80%) | 80% (80%, 80%) | 80% (80%, 80%) | 90% (90%, 90%) | 90% (90%, 90%) |
|  | Min, Max | 80%, 80% | 80%, 80% | 80%, 80% | -10%, 90% | -10%, 90% |
| Rounds | | | | | | |
|  | Mean (95% CI) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1.2 (1, 1.5) | 1.3 (1, 1.5) |
|  | Median (Q1, Q3) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) |
|  | Min, Max | 1, 1 | 1, 1 | 1, 1 | 1, 11 | 1, 11 |

**TABLE S20** Hypred Mid Tier, AGAIG, SD=0 ME=0.75, Estimated betas

|  | | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
|  | Mean (95% CI) | 1.8% (0.2%, 6.3%) | 1.8% (0.2%, 6.3%) | 1.8% (0.2%, 6.3%) | 6.2% (2.5%, 12.5%) | 5.4% (2%, 11.3%) |
| Efficiency | | | | | | |
|  | Mean (95% CI) | 78.8% (78.2%, 79.5%) | 78.8% (78.1%, 79.5%) | 78.8% (78.2%, 79.5%) | 82.1% (81.4%, 82.7%) | 81.7% (81%, 82.3%) |
|  | Median (Q1, Q3) | 80% (80%, 80%) | 80% (80%, 80%) | 80% (80%, 80%) | 90% (90%, 90%) | 90% (90%, 90%) |
|  | Min, Max | -15%, 80% | -14%, 80% | -9%, 80% | -10%, 90% | -10%, 90% |
| Rounds | | | | | | |
|  | Mean (95% CI) | 1.3 (0.9, 1.6) | 1.3 (0.9, 1.6) | 1.1 (1, 1.3) | 2.2 (1.7, 2.7) | 2.2 (1.7, 2.7) |
|  | Median (Q1, Q3) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) |
|  | Min, Max | 1, 22 | 1, 20 | 1, 10 | 1, 11 | 1, 11 |

**TABLE S21** Hypred Mid Tier, AGAIG, SD=1 ME=0.05, Estimated betas

| | | **Linreg** | **MSS** | **LRSOE** | **MiniPred** | **Mini.alg** |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | 87% (82.3%, 90.8%) | 88.1% (83.6%, 91.8%) | 91.2% (87.1%, 94.3%) | 93.9% (90.2%, 96.5%) | 95.4% (92.1%, 97.6%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 77.2% (76.5%, 77.8%) | 76.5% (75.8%, 77.1%) | 76.5% (75.8%, 77.1%) | 79.1% (78.4%, 79.7%) | 77.7% (77.1%, 78.4%) |
| | Median (Q1, Q3) | 78% (76%, 79%) | 77% (75%, 78%) | 77% (75%, 78%) | 80% (75%, 85%) | 79% (72.2%, 84%) |
| | Min, Max | 61%, 80% | 57%, 80% | 59%, 80% | 39%, 90% | 42%, 90% |
| Rounds | | | | | | |
| | Mean (95% CI) | 2.5 (2.4, 2.7) | 2.1 (2, 2.2) | 2 (1.9, 2.1) | 7.1 (6.6, 7.6) | 7.5 (7, 8) |
| | Median (Q1, Q3) | 2 (2, 3) | 2 (2, 2) | 2 (2, 2) | 8 (5, 10) | 8 (5, 10) |
| | Min, Max | 1, 7 | 1, 6 | 1, 4 | 1, 11 | 1, 11 |

**TABLE S22** Hypred Mid Tier, AGAIG, SD=1 ME=0.12, Estimated betas

| | | **Linreg** | **MSS** | **LRSOE** | **MiniPred** | **Mini.alg** |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | 77% (71.4%, 82%) | 80.1% (74.7%, 84.7%) | 80.5% (75.1%, 85.1%) | 87% (82.3%, 90.8%) | 87.4% (82.7%, 91.1%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 77.1% (76.4%, 77.7%) | 76.3% (75.6%, 77%) | 76.3% (75.6%, 77%) | 77.9% (77.2%, 78.5%) | 76.9% (76.2%, 77.6%) |
| | Median (Q1, Q3) | 78% (76%, 79%) | 77% (75%, 79%) | 77% (75%, 79%) | 80% (72%, 85%) | 80% (70.2%, 83.8%) |
| | Min, Max | 53%, 80% | 60%, 80% | 55%, 80% | 33%, 90% | 36%, 90% |
| Rounds | | | | | | |
| | Mean (95% CI) | 2.6 (2.4, 2.8) | 2.1 (2, 2.2) | 2 (1.9, 2.2) | 7.5 (6.9, 8) | 7.8 (7.3, 8.3) |
| | Median (Q1, Q3) | 2 (2, 3) | 2 (2, 2) | 2 (2, 2) | 8 (5, 11) | 8 (6, 11) |
| | Min, Max | 1, 8 | 1, 5 | 1, 4 | 1, 11 | 1, 11 |

**TABLE S23** Hypred Mid Tier, AGAIG, SD=1 ME=0.25, Estimated betas

| | | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | 52.4% (46.5%, 58.4%) | 55.6% (49.6%, 61.4%) | 55.9% (50%, 61.8%) | 67.8% (62.1%, 73.2%) | 67.8% (62.1%, 73.2%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 76.8% (76.1%, 77.5%) | 76.2% (75.5%, 76.9%) | 75.9% (75.2%, 76.6%) | 75.1% (74.4%, 75.8%) | 73.6% (72.9%, 74.3%) |
| | Median (Q1, Q3) | 79% (76%, 80%) | 77% (75%, 80%) | 77% (74.2%, 80%) | 80% (67%, 87%) | 80% (64%, 85%) |
| | Min, Max | 56%, 80% | 57%, 80% | 56%, 80% | 22%, 90% | 26%, 90% |
| Rounds | | | | | | |
| | Mean (95% CI) | 2.6 (2.3, 2.8) | 2.1 (1.9, 2.2) | 2 (1.8, 2.1) | 7.5 (6.9, 8.1) | 7.8 (7.2, 8.3) |
| | Median (Q1, Q3) | 2 (1, 3) | 2 (1, 2) | 2 (1, 2) | 9 (4, 11) | 9 (5, 11) |
| | Min, Max | 1, 8 | 1, 6 | 1, 5 | 1, 11 | 1, 11 |

**TABLE S24** Hypred Mid Tier, AGAIG, SD=1 ME=0.5, Estimated betas

| | | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | 27.7% (23.6%, 32.2%) | 28.9% (24.7%, 33.4%) | 30.3% (26%, 34.9%) | 48.5% (43.7%, 53.3%) | 47.3% (42.5%, 52.2%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 74.7% (74%, 75.4%) | 74.2% (73.5%, 74.9%) | 73.7% (73%, 74.4%) | 69.3% (68.6%, 70%) | 68.7% (67.9%, 69.4%) |
| | Median (Q1, Q3) | 80% (76%, 80%) | 80% (75%, 80%) | 80% (73%, 80%) | 80% (52.2%, 90%) | 80% (52%, 90%) |
| | Min, Max | 18%, 80% | 14%, 80% | 7%, 80% | -10%, 90% | -10%, 90% |
| Rounds | | | | | | |
| | Mean (95% CI) | 3.1 (2.6, 3.6) | 2.5 (2, 2.9) | 2 (1.8, 2.2) | 6.6 (5.9, 7.4) | 6.7 (6, 7.4) |
| | Median (Q1, Q3) | 1 (1, 3.75) | 1 (1, 2) | 1 (1, 2) | 8 (1, 11) | 7.5 (1, 11) |
| | Min, Max | 1, 17 | 1, 15 | 1, 8 | 1, 11 | 1, 11 |

**TABLE S25** Hypred low Tier, AGAIG, SD=0 ME=0, Estimated betas

|  | | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | NaN% (0%, 100%) | NaN% (0%, 100%) | NaN% (0%, 100%) | NaN% (0%, 100%) | NaN% (0%, 100%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 80% (79.5%, 80.5%) | 80% (79.5%, 80.5%) | 80% (79.5%, 80.5%) | 90% (89.7%, 90.3%) | 90% (89.7%, 90.3%) |
| | Median (Q1, Q3) | 80% (80%, 80%) | 80% (80%, 80%) | 80% (80%, 80%) | 90% (90%, 90%) | 90% (90%, 90%) |
| | Min, Max | 80%, 80% | 80%, 80% | 80%, 80% | 90%, 90% | 90%, 90% |
| Rounds | | | | | | |
| | Mean (95% CI) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) |
| | Median (Q1, Q3) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) |
| | Min, Max | 1, 1 | 1, 1 | 1, 1 | 1, 1 | 1, 1 |

**TABLE S26** Hypred low Tier, AGAIG, SD=0 ME=0.25, Estimated betas

|  | | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | NaN% (0%, 100%) | NaN% (0%, 100%) | NaN% (0%, 100%) | NaN% (0%, 100%) | NaN% (0%, 100%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 80% (79.5%, 80.5%) | 80% (79.5%, 80.5%) | 80% (79.5%, 80.5%) | 90% (89.7%, 90.3%) | 90% (89.7%, 90.3%) |
| | Median (Q1, Q3) | 80% (80%, 80%) | 80% (80%, 80%) | 80% (80%, 80%) | 90% (90%, 90%) | 90% (90%, 90%) |
| | Min, Max | 80%, 80% | 80%, 80% | 80%, 80% | 90%, 90% | 90%, 90% |
| Rounds | | | | | | |
| | Mean (95% CI) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) |
| | Median (Q1, Q3) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) |
| | Min, Max | 1, 1 | 1, 1 | 1, 1 | 1, 1 | 1, 1 |

**TABLE S27** Hypred low Tier, AGAIG, SD=0 ME=0.5, Estimated betas

| | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|
| Sensitivity | | | | | |
| Mean (95% CI) | NaN% (0%, 100%) | NaN% (0%, 100%) | NaN% (0%, 100%) | NaN% (0%, 100%) | NaN% (0%, 100%) |
| Efficiency | | | | | |
| Mean (95% CI) | 80% (79.5%, 80.5%) | 80% (79.5%, 80.5%) | 80% (79.5%, 80.5%) | 88.7% (88.3%, 89%) | 88.7% (88.3%, 89%) |
| Median (Q1, Q3) | 80% (80%, 80%) | 80% (80%, 80%) | 80% (80%, 80%) | 90% (90%, 90%) | 90% (90%, 90%) |
| Min, Max | 80%, 80% | 80%, 80% | 80%, 80% | -10%, 90% | -10%, 90% |
| Rounds | | | | | |
| Mean (95% CI) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1.1 (1, 1.3) | 1.1 (1, 1.3) |
| Median (Q1, Q3) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) |
| Min, Max | 1, 1 | 1, 1 | 1, 1 | 1, 11 | 1, 11 |

**TABLE S28** Hypred low Tier, AGAIG, SD=0 ME=0.75, Estimated betas

| | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|
| Sensitivity | | | | | |
| Mean (95% CI) | 0% (0%, 11.6%) | 0% (0%, 11.6%) | 0% (0%, 11.6%) | 3.3% (0.1%, 17.2%) | 3.3% (0.1%, 17.2%) |
| Efficiency | | | | | |
| Mean (95% CI) | 79.8% (79.3%, 80.2%) | 79.7% (79.3%, 80.2%) | 79.7% (79.2%, 80.1%) | 84.6% (84.1%, 85%) | 84.4% (84%, 84.9%) |
| Median (Q1, Q3) | 80% (80%, 80%) | 80% (80%, 80%) | 80% (80%, 80%) | 90% (90%, 90%) | 90% (90%, 90%) |
| Min, Max | 10%, 80% | 6%, 80% | -4%, 80% | -10%, 90% | -10%, 90% |
| Rounds | | | | | |
| Mean (95% CI) | 1.1 (0.9, 1.2) | 1.1 (1, 1.2) | 1 (1, 1.1) | 1.7 (1.4, 2) | 1.7 (1.4, 2) |
| Median (Q1, Q3) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) |
| Min, Max | 1, 19 | 1, 17 | 1, 8 | 1, 11 | 1, 11 |

**TABLE S29** Hypred low Tier, AGAIG, SD=1 ME=0.05, Estimated betas

|  | | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | 81.3% (76.2%, 85.7%) | 83.5% (78.6%, 87.6%) | 83.8% (78.9%, 87.9%) | 93.9% (90.4%, 96.4%) | 94.6% (91.3%, 96.9%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 78.9% (78.4%, 79.3%) | 78.5% (78%, 79%) | 78.6% (78.1%, 79.1%) | 84.2% (83.8%, 84.6%) | 83.4% (83%, 83.8%) |
| | Median (Q1, Q3) | 79% (78%, 80%) | 79% (77%, 80%) | 79% (78%, 80%) | 85% (81%, 90%) | 84% (80%, 90%) |
| | Min, Max | 71%, 80% | 72%, 80% | 72%, 80% | 61%, 90% | 52%, 90% |
| Rounds | | | | | | |
| | Mean (95% CI) | 1.8 (1.7, 1.9) | 1.6 (1.5, 1.7) | 1.6 (1.6, 1.7) | 5.2 (4.8, 5.6) | 5.6 (5.2, 6.1) |
| | Median (Q1, Q3) | 2 (1, 2) | 2 (1, 2) | 2 (1, 2) | 5 (1, 8) | 6 (1, 9) |
| | Min, Max | 1, 5 | 1, 3 | 1, 3 | 1, 11 | 1, 11 |

**TABLE S30** Hypred low Tier, AGAIG, SD=1 ME=0.12, Estimated betas

|  | | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | 68.2% (62.6%, 73.5%) | 70.6% (65.1%, 75.7%) | 70.3% (64.7%, 75.4%) | 84.5% (79.8%, 88.4%) | 84.5% (79.8%, 88.4%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 78.9% (78.5%, 79.4%) | 78.5% (78%, 79%) | 78.6% (78.1%, 79.1%) | 83.3% (82.9%, 83.8%) | 82.6% (82.2%, 83%) |
| | Median (Q1, Q3) | 79% (79%, 80%) | 79% (78%, 80%) | 79% (78%, 80%) | 85% (80%, 90%) | 84% (79%, 90%) |
| | Min, Max | 71%, 80% | 71%, 80% | 71%, 80% | 57%, 90% | 51%, 90% |
| Rounds | | | | | | |
| | Mean (95% CI) | 1.8 (1.7, 1.9) | 1.6 (1.5, 1.6) | 1.6 (1.5, 1.7) | 5.5 (5, 5.9) | 5.9 (5.5, 6.4) |
| | Median (Q1, Q3) | 2 (1, 2) | 2 (1, 2) | 2 (1, 2) | 5 (1, 9) | 6 (1, 10) |
| | Min, Max | 1, 5 | 1, 4 | 1, 4 | 1, 11 | 1, 11 |

**TABLE S31** Hypred low Tier, AGAIG, SD=1 ME=0.25, Estimated betas

| | | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | 46% (40.7%, 51.4%) | 48.6% (43.2%, 54%) | 48% (42.6%, 53.4%) | 67.5% (62.3%, 72.4%) | 67.8% (62.6%, 72.7%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 78.7% (78.2%, 79.2%) | 78.3% (77.9%, 78.8%) | 78.3% (77.8%, 78.8%) | 80.9% (80.4%, 81.3%) | 80.3% (79.8%, 80.7%) |
| | Median (Q1, Q3) | 80% (79%, 80%) | 80% (77%, 80%) | 80% (78%, 80%) | 85.5% (77%, 90%) | 84% (76%, 90%) |
| | Min, Max | 53%, 80% | 60%, 80% | 50%, 80% | 24%, 90% | 24%, 90% |
| Rounds | | | | | | |
| | Mean (95% CI) | 1.8 (1.7, 1.9) | 1.6 (1.5, 1.7) | 1.6 (1.5, 1.6) | 5.7 (5.2, 6.1) | 6 (5.5, 6.4) |
| | Median (Q1, Q3) | 1 (1, 2) | 1 (1, 2) | 1 (1, 2) | 5 (1, 11) | 6 (1, 11) |
| | Min, Max | 1, 9 | 1, 6 | 1, 5 | 1, 11 | 1, 11 |

**TABLE S32** Hypred low Tier, AGAIG, SD=1 ME=0.5, Estimated betas

| | | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | 26.7% (23%, 30.7%) | 28.6% (24.8%, 32.7%) | 28.1% (24.2%, 32.1%) | 48.5% (44.1%, 52.8%) | 47.7% (43.4%, 52.1%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 77.5% (77%, 77.9%) | 77.2% (76.7%, 77.6%) | 76.8% (76.3%, 77.2%) | 74.5% (74%, 75%) | 73.9% (73.4%, 74.4%) |
| | Median (Q1, Q3) | 80% (79%, 80%) | 80% (77%, 80%) | 80% (77%, 80%) | 84% (69.7%, 90%) | 84% (69%, 90%) |
| | Min, Max | -2%, 80% | -2%, 80% | -7%, 80% | -10%, 90% | -10%, 90% |
| Rounds | | | | | | |
| | Mean (95% CI) | 2.2 (1.9, 2.5) | 1.8 (1.6, 2) | 1.6 (1.5, 1.8) | 5.9 (5.4, 6.4) | 6.1 (5.6, 6.6) |
| | Median (Q1, Q3) | 1 (1, 2) | 1 (1, 2) | 1 (1, 2) | 5 (1, 11) | 7 (1, 11) |
| | Min, Max | 1, 20 | 1, 19 | 1, 10 | 1, 11 | 1, 11 |

**TABLE S33** Hypred Mid Tier, Reverse, SD=0 ME=0, Estimated betas

|  | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|
| Sensitivity |  |  |  |  |  |
| Mean (95% CI) | NaN% (0%, 100%) | NaN% (0%, 100%) | NaN% (0%, 100%) | NaN% (0%, 100%) | NaN% (0%, 100%) |
| Efficiency |  |  |  |  |  |
| Mean (95% CI) | 80% (79.4%, 80.6%) | 80% (79.4%, 80.6%) | 80% (79.4%, 80.6%) | 90% (89.5%, 90.5%) | 90% (89.5%, 90.5%) |
| Median (Q1, Q3) | 80% (80%, 80%) | 80% (80%, 80%) | 80% (80%, 80%) | 90% (90%, 90%) | 90% (90%, 90%) |
| Min, Max | 80%, 80% | 80%, 80% | 80%, 80% | 90%, 90% | 90%, 90% |
| Rounds |  |  |  |  |  |
| Mean (95% CI) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) |
| Median (Q1, Q3) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) |
| Min, Max | 1, 1 | 1, 1 | 1, 1 | 1, 1 | 1, 1 |

**TABLE S34** Hypred Mid Tier, Reverse, SD=0 ME=0.25, Estimated betas

|  | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|
| Sensitivity |  |  |  |  |  |
| Mean (95% CI) | NaN% (0%, 100%) | NaN% (0%, 100%) | NaN% (0%, 100%) | NaN% (0%, 100%) | NaN% (0%, 100%) |
| Efficiency |  |  |  |  |  |
| Mean (95% CI) | 80% (79.4%, 80.6%) | 80% (79.4%, 80.6%) | 80% (79.4%, 80.6%) | 90% (89.5%, 90.5%) | 90% (89.5%, 90.5%) |
| Median (Q1, Q3) | 80% (80%, 80%) | 80% (80%, 80%) | 80% (80%, 80%) | 90% (90%, 90%) | 90% (90%, 90%) |
| Min, Max | 80%, 80% | 80%, 80% | 80%, 80% | 90%, 90% | 90%, 90% |
| Rounds |  |  |  |  |  |
| Mean (95% CI) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) |
| Median (Q1, Q3) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) |
| Min, Max | 1, 1 | 1, 1 | 1, 1 | 1, 1 | 1, 1 |

**TABLE S35** Hypred Mid Tier, Reverse, SD=0 ME=0.5, Estimated betas

| | | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | NaN% (0%, 100%) | NaN% (0%, 100%) | NaN% (0%, 100%) | NaN% (0%, 100%) | NaN% (0%, 100%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 80% (79.4%, 80.6%) | 80% (79.4%, 80.6%) | 80% (79.4%, 80.6%) | 90% (89.5%, 90.5%) | 90% (89.5%, 90.5%) |
| | Median (Q1, Q3) | 80% (80%, 80%) | 80% (80%, 80%) | 80% (80%, 80%) | 90% (90%, 90%) | 90% (90%, 90%) |
| | Min, Max | 80%, 80% | 80%, 80% | 80%, 80% | 90%, 90% | 90%, 90% |
| Rounds | | | | | | |
| | Mean (95% CI) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) |
| | Median (Q1, Q3) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) |
| | Min, Max | 1, 1 | 1, 1 | 1, 1 | 1, 1 | 1, 1 |

**TABLE S36** Hypred Mid Tier, Reverse, SD=0 ME=0.75, Estimated betas

| | | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | 0% (0%, 21.8%) | 0% (0%, 21.8%) | 0% (0%, 21.8%) | 0% (0%, 21.8%) | 0% (0%, 21.8%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 80% (79.4%, 80.6%) | 80% (79.4%, 80.6%) | 80% (79.4%, 80.6%) | 88% (87.5%, 88.5%) | 88.1% (87.5%, 88.6%) |
| | Median (Q1, Q3) | 80% (80%, 80%) | 80% (80%, 80%) | 80% (80%, 80%) | 90% (90%, 90%) | 90% (90%, 90%) |
| | Min, Max | 80%, 80% | 80%, 80% | 80%, 80% | -10%, 90% | -10%, 90% |
| Rounds | | | | | | |
| | Mean (95% CI) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1.2 (1, 1.4) | 1.2 (1, 1.4) |
| | Median (Q1, Q3) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) | 1 (1, 1) |
| | Min, Max | 1, 1 | 1, 1 | 1, 1 | 1, 11 | 1, 11 |

**TABLE S37** Hypred Mid Tier, Reverse, SD=1 ME=0.05, Estimated betas

| | | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | 86% (78.5%, 91.6%) | 90.9% (84.3%, 95.4%) | 90.1% (83.3%, 94.8%) | 93.4% (87.4%, 97.1%) | 95.9% (90.6%, 98.6%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 79% (78.3%, 79.6%) | 78.6% (77.9%, 79.3%) | 78.7% (78%, 79.3%) | 84.1% (83.5%, 84.7%) | 84.6% (84%, 85.1%) |
| | Median (Q1, Q3) | 79% (79%, 80%) | 79% (78%, 80%) | 79% (78%, 80%) | 85% (80%, 90%) | 86% (82%, 90%) |
| | Min, Max | 73%, 80% | 73%, 80% | 70%, 80% | 64%, 90% | 60%, 90% |
| Rounds | | | | | | |
| | Mean (95% CI) | 1.8 (1.6, 1.9) | 1.6 (1.5, 1.7) | 1.6 (1.5, 1.7) | 5.4 (4.8, 6) | 4.9 (4.3, 5.4) |
| | Median (Q1, Q3) | 2 (1, 2) | 2 (1, 2) | 2 (1, 2) | 6 (1, 8.75) | 4 (1, 8) |
| | Min, Max | 1, 4 | 1, 4 | 1, 3 | 1, 11 | 1, 11 |

**TABLE S38** Hypred Mid Tier, Reverse, SD=1 ME=0.12, Estimated betas

| | | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | 70.5% (61.6%, 78.4%) | 73% (64.2%, 80.6%) | 72.1% (63.3%, 79.9%) | 82% (74%, 88.3%) | 83.6% (75.8%, 89.7%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 79.1% (78.4%, 79.7%) | 78.7% (78%, 79.4%) | 78.8% (78.1%, 79.4%) | 84.1% (83.5%, 84.7%) | 84.3% (83.7%, 84.9%) |
| | Median (Q1, Q3) | 79% (79%, 80%) | 79% (78%, 80%) | 79% (78%, 80%) | 85% (81%, 90%) | 86% (81%, 90%) |
| | Min, Max | 71%, 80% | 69%, 80% | 70%, 80% | 60%, 90% | 60%, 90% |
| Rounds | | | | | | |
| | Mean (95% CI) | 1.7 (1.6, 1.9) | 1.6 (1.5, 1.7) | 1.6 (1.5, 1.7) | 5.3 (4.7, 5.9) | 5 (4.4, 5.6) |
| | Median (Q1, Q3) | 2 (1, 2) | 2 (1, 2) | 2 (1, 2) | 5 (1, 9) | 4 (1, 8.75) |
| | Min, Max | 1, 5 | 1, 5 | 1, 4 | 1, 11 | 1, 11 |

**TABLE S39** Hypred Mid Tier, Reverse, SD=1 ME=0.25, Estimated betas

|  |  | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|---|
| Sensitivity |  |  |  |  |  |  |
|  | Mean (95% CI) | 45.9% (37.6%, 54.3%) | 47.9% (39.6%, 56.4%) | 47.3% (38.9%, 55.7%) | 61.6% (53.2%, 69.6%) | 63.7% (55.3%, 71.5%) |
| Efficiency |  |  |  |  |  |  |
|  | Mean (95% CI) | 79.1% (78.4%, 79.7%) | 78.7% (78%, 79.4%) | 78.7% (78.1%, 79.4%) | 82.9% (82.3%, 83.5%) | 83.3% (82.7%, 83.9%) |
|  | Median (Q1, Q3) | 80% (79%, 80%) | 80% (78%, 80%) | 80% (78%, 80%) | 86% (80%, 90%) | 87% (80%, 90%) |
|  | Min, Max | 63%, 80% | 63%, 80% | 62%, 80% | 40%, 90% | 41%, 90% |
| Rounds |  |  |  |  |  |  |
|  | Mean (95% CI) | 1.6 (1.5, 1.8) | 1.5 (1.4, 1.7) | 1.5 (1.4, 1.6) | 5.4 (4.7, 6.1) | 5 (4.3, 5.6) |
|  | Median (Q1, Q3) | 1 (1, 2) | 1 (1, 2) | 1 (1, 2) | 5 (1, 10) | 4 (1, 9) |
|  | Min, Max | 1, 6 | 1, 6 | 1, 5 | 1, 11 | 1, 11 |

**TABLE S40** Hypred Mid Tier, Reverse, SD=1 ME=0.5, Estimated betas

|  |  | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|---|
| Sensitivity |  |  |  |  |  |  |
|  | Mean (95% CI) | 23.5% (18.1%, 29.5%) | 25.7% (20.1%, 31.9%) | 24.3% (18.9%, 30.5%) | 48.2% (41.6%, 55%) | 47.8% (41.1%, 54.5%) |
| Efficiency |  |  |  |  |  |  |
|  | Mean (95% CI) | 78.3% (77.6%, 78.9%) | 77.9% (77.2%, 78.5%) | 77.8% (77.2%, 78.5%) | 78% (77.3%, 78.7%) | 78.3% (77.7%, 79%) |
|  | Median (Q1, Q3) | 80% (79%, 80%) | 80% (78%, 80%) | 80% (78%, 80%) | 87.5% (72.2%, 90%) | 87% (73.2%, 90%) |
|  | Min, Max | 31%, 80% | 29%, 80% | 32%, 80% | -5%, 90% | -6%, 90% |
| Rounds |  |  |  |  |  |  |
|  | Mean (95% CI) | 1.9 (1.6, 2.2) | 1.6 (1.4, 1.8) | 1.5 (1.3, 1.6) | 5.3 (4.6, 6.1) | 5.2 (4.5, 5.9) |
|  | Median (Q1, Q3) | 1 (1, 2) | 1 (1, 2) | 1 (1, 2) | 3 (1, 11) | 4 (1, 11) |
|  | Min, Max | 1, 13 | 1, 12 | 1, 7 | 1, 11 | 1, 11 |

TABLE S41 Hypred low Tier, Reverse, SD=0 ME=0, Estimated betas

| | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|
| Sensitivity | | | | | |
| Mean (95% CI) | 95% (94.2%, 95.8%) | 94.4% (93.5%, 95.2%) | 96.7% (96%, 97.4%) | 100% (99.9%, 100%) | 100% (99.9%, 100%) |
| Efficiency | | | | | |
| Mean (95% CI) | 52.4% (51.8%, 52.9%) | 61.2% (60.6%, 61.8%) | 46.6% (46%, 47.1%) | 20.3% (19.8%, 20.7%) | 46.4% (45.8%, 46.9%) |
| Median (Q1, Q3) | 53% (45%, 59.2%) | 61% (56%, 67%) | 49% (37%, 56%) | 20% (10%, 30%) | 47% (38%, 55%) |
| Min, Max | 26%, 74% | 40%, 76% | 11%, 73% | -10%, 61% | 12%, 76% |
| Rounds | | | | | |
| Mean (95% CI) | 7.7 (7.5, 7.9) | 5.4 (5.2, 5.5) | 4.8 (4.7, 4.9) | 11 (11, 11) | 10.4 (10.2, 10.5) |
| Median (Q1, Q3) | 7.5 (6, 9) | 5 (4, 6) | 5 (4, 5) | 11 (11, 11) | 11 (10, 11) |
| Min, Max | 3, 12 | 2, 9 | 3, 7 | 11, 11 | 6, 11 |

TABLE S42 Hypred low Tier, Reverse, SD=0 ME=0.25, Estimated betas

| | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|
| Sensitivity | | | | | |
| Mean (95% CI) | 70% (68.3%, 71.7%) | 68.9% (67.2%, 70.6%) | 73.9% (72.3%, 75.5%) | 85.5% (84.1%, 86.7%) | 83% (81.6%, 84.4%) |
| Efficiency | | | | | |
| Mean (95% CI) | 51.3% (50.8%, 51.9%) | 56.3% (55.7%, 56.8%) | 46.1% (45.6%, 46.7%) | 22.9% (22.4%, 23.4%) | 41.2% (40.7%, 41.8%) |
| Median (Q1, Q3) | 53% (42%, 64%) | 60% (49%, 69%) | 49% (35%, 59%) | 21% (10%, 33.2%) | 43% (26%, 58%) |
| Min, Max | 0%, 79% | 0%, 77% | -4%, 77% | -10%, 80% | -10%, 86% |
| Rounds | | | | | |
| Mean (95% CI) | 9 (8.5, 9.4) | 6.5 (6.1, 6.8) | 5 (4.9, 5.2) | 11 (11, 11) | 10.3 (10.2, 10.5) |
| Median (Q1, Q3) | 9 (6, 11) | 6 (4, 8) | 5 (4, 6) | 11 (11, 11) | 11 (10, 11) |
| Min, Max | 2, 24 | 2, 18 | 2, 9 | 10, 11 | 3, 11 |

**TABLE S43** Hypred low Tier, Reverse, SD=0 ME=0.5, Estimated betas

| | | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | 56% (54.1%, 57.8%) | 55.9% (54.1%, 57.7%) | 59.8% (58%, 61.6%) | 73.8% (72.2%, 75.4%) | 72.4% (70.7%, 74%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 53.5% (52.9%, 54.1%) | 56.3% (55.8%, 56.9%) | 48.4% (47.9%, 49%) | 27.4% (26.9%, 27.9%) | 42.1% (41.5%, 42.6%) |
| | Median (Q1, Q3) | 59% (40%, 72%) | 64% (44%, 73%) | 53.5% (34%, 65%) | 22% (6%, 44%) | 43% (19%, 66.2%) |
| | Min, Max | -15%, 80% | -11%, 80% | -17%, 80% | -10%, 90% | -10%, 90% |
| Rounds | | | | | | |
| | Mean (95% CI) | 8.7 (8.1, 9.3) | 6.4 (5.9, 6.9) | 4.7 (4.5, 5) | 10.6 (10.4, 10.8) | 9.8 (9.5, 10) |
| | Median (Q1, Q3) | 8 (4, 12) | 5 (3, 9) | 4 (3, 6) | 11 (11, 11) | 11 (10, 11) |
| | Min, Max | 1, 25 | 1, 20 | 1, 11 | 1, 11 | 1, 11 |

**TABLE S44** Hypred low Tier, Reverse, SD=0 ME=0.75, Estimated betas

| | | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | 46.4% (44.6%, 48.2%) | 47.3% (45.5%, 49.1%) | 49.6% (47.8%, 51.4%) | 65.3% (63.6%, 67%) | 64.9% (63.1%, 66.6%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 55.2% (54.7%, 55.8%) | 57.2% (56.6%, 57.7%) | 50.8% (50.2%, 51.4%) | 31.1% (30.6%, 31.6%) | 43.3% (42.7%, 43.8%) |
| | Median (Q1, Q3) | 64% (38.7%, 77%) | 68% (43%, 75%) | 57% (34.8%, 71%) | 23.5% (1.7%, 58%) | 46% (14%, 73%) |
| | Min, Max | -20%, 80% | -20%, 80% | -20%, 80% | -10%, 90% | -10%, 90% |
| Rounds | | | | | | |
| | Mean (95% CI) | 8.3 (7.6, 9) | 6.2 (5.6, 6.8) | 4.4 (4.1, 4.7) | 10.2 (9.9, 10.5) | 9.4 (9, 9.7) |
| | Median (Q1, Q3) | 7 (3, 12.25) | 4 (2, 10) | 4 (2, 6) | 11 (11, 11) | 11 (9, 11) |
| | Min, Max | 1, 30 | 1, 22 | 1, 11 | 1, 11 | 1, 11 |

**TABLE S45** Hypred low Tier, Reverse, SD=1 ME=0.05, Estimated betas

| | | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | 88.1% (86.8%, 89.3%) | 86.6% (85.2%, 87.8%) | 90% (88.8%, 91.2%) | 96.3% (95.5%, 97%) | 95.5% (94.6%, 96.3%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 52.8% (52.2%, 53.4%) | 59.1% (58.5%, 59.6%) | 48.9% (48.4%, 49.5%) | 28.6% (28.1%, 29.1%) | 45.4% (44.9%, 46%) |
| | Median (Q1, Q3) | 54.5% (45%, 62%) | 60% (53%, 67%) | 49% (40%, 59%) | 29% (19%, 38%) | 45.5% (37%, 55%) |
| | Min, Max | 12%, 73% | 16%, 77% | 11%, 75% | -9%, 70% | 0%, 76% |
| Rounds | | | | | | |
| | Mean (95% CI) | 8.4 (8.1, 8.7) | 5.9 (5.6, 6.1) | 4.9 (4.8, 5) | 11 (11, 11) | 10.6 (10.5, 10.7) |
| | Median (Q1, Q3) | 8 (6, 10) | 6 (4, 7) | 5 (4, 6) | 11 (11, 11) | 11 (11, 11) |
| | Min, Max | 3, 18 | 2, 15 | 2, 8 | 11, 11 | 6, 11 |

**TABLE S46** Hypred low Tier, Reverse, SD=1 ME=0.12, Estimated betas

| | | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|---|
| Sensitivity | | | | | | |
| | Mean (95% CI) | 83.7% (82.2%, 85.1%) | 81.4% (79.9%, 82.9%) | 85.8% (84.4%, 87.1%) | 92.2% (91.1%, 93.2%) | 92% (90.9%, 93.1%) |
| Efficiency | | | | | | |
| | Mean (95% CI) | 51.9% (51.4%, 52.5%) | 57.4% (56.9%, 58%) | 48% (47.5%, 48.6%) | 28.8% (28.3%, 29.3%) | 43.4% (42.8%, 44%) |
| | Median (Q1, Q3) | 54% (43.8%, 62%) | 61% (49.8%, 67%) | 49.5% (39%, 58%) | 29% (18%, 40%) | 43% (32%, 57%) |
| | Min, Max | -2%, 74% | 2%, 77% | -10%, 75% | -10%, 70% | -3%, 76% |
| Rounds | | | | | | |
| | Mean (95% CI) | 8.9 (8.5, 9.2) | 6.2 (5.9, 6.6) | 5.1 (4.9, 5.2) | 11 (11, 11) | 10.6 (10.4, 10.7) |
| | Median (Q1, Q3) | 8.5 (7, 11) | 6 (4, 8) | 5 (4, 6) | 11 (11, 11) | 11 (11, 11) |
| | Min, Max | 3, 21 | 2, 17 | 2, 9 | 10, 11 | 6, 11 |

**TABLE S47** Hypred low Tier, Reverse, SD=1 ME=0.25, Estimated betas

| | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|
| Sensitivity | | | | | |
| Mean (95% CI) | 74.6% (72.9%, 76.2%) | 72.8% (71.1%, 74.5%) | 77.8% (76.2%, 79.4%) | 85.4% (84%, 86.7%) | 85.5% (84.1%, 86.8%) |
| Efficiency | | | | | |
| Mean (95% CI) | 52% (51.4%, 52.5%) | 56.5% (55.9%, 57%) | 47.8% (47.2%, 48.4%) | 28.9% (28.4%, 29.4%) | 41.6% (41.1%, 42.2%) |
| Median (Q1, Q3) | 55% (42.8%, 65%) | 61% (49%, 69%) | 50% (37%, 60%) | 28% (14%, 43%) | 44% (25.8%, 58.2%) |
| Min, Max | -20%, 79% | -20%, 78% | -20%, 78% | -10%, 81% | -10%, 87% |
| Rounds | | | | | |
| Mean (95% CI) | 9.2 (8.7, 9.6) | 6.4 (6, 6.8) | 5 (4.8, 5.2) | 11 (10.9, 11) | 10.4 (10.3, 10.6) |
| Median (Q1, Q3) | 9 (6, 11) | 6 (4, 8) | 5 (4, 6) | 11 (11, 11) | 11 (11, 11) |
| Min, Max | 2, 27 | 2, 22 | 2, 11 | 6, 11 | 3, 11 |

**TABLE S48** Hypred low Tier, Reverse, SD=1 ME=0.5, Estimated betas

| | Linreg | MSS | LRSOE | MiniPred | Mini.alg |
|---|---|---|---|---|---|
| Sensitivity | | | | | |
| Mean (95% CI) | 61.2% (59.4%, 62.9%) | 60.1% (58.3%, 61.9%) | 64.2% (62.5%, 66%) | 75.8% (74.2%, 77.3%) | 75.1% (73.5%, 76.6%) |
| Efficiency | | | | | |
| Mean (95% CI) | 52.2% (51.6%, 52.8%) | 55.4% (54.8%, 56%) | 47.7% (47.2%, 48.3%) | 30.2% (29.7%, 30.8%) | 40.9% (40.3%, 41.4%) |
| Median (Q1, Q3) | 58.5% (38%, 70%) | 62% (44%, 72%) | 52% (36%, 65%) | 29% (8%, 49%) | 45.5% (20%, 64%) |
| Min, Max | -20%, 80% | -20%, 80% | -20%, 80% | -10%, 90% | -10%, 90% |
| Rounds | | | | | |
| Mean (95% CI) | 9.3 (8.7, 9.9) | 6.6 (6.1, 7.1) | 4.8 (4.6, 5.1) | 10.8 (10.7, 10.9) | 10.1 (9.9, 10.3) |
| Median (Q1, Q3) | 9 (5, 12) | 5 (3, 9) | 5 (3, 6) | 11 (11, 11) | 11 (11, 11) |
| Min, Max | 1, 29 | 1, 22 | 1, 12 | 1, 11 | 1, 11 |

# References