This page presents all results from the mid tier of the Hypred in the AGAIG scenario. Included are the results for each of the 8 different combinations of SD and ME using betas estimated from a training set of 5,000 obs. Only the random matrix fill method is shown.

TABLE 1 Hypred Mid Tier, AGAIG, SD=0 ME=0, est betas

		Linreg	**MSS**	**LRSOE**	**MiniCov**	**Mini**
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

The result in the above table is what we would expect. Because we have perfect prediction in this scenario, there are no failures in the mid-tier group. Because there is no ME, all pools immediately test below the limit, and no individual samples are tested.

TABLE 2 Hypred Mid Tier, AGAIG, SD=0 ME=0.25, est betas

		Linreg	**MSS**	**LRSOE**	**MiniCov**	**Mini**
Sensitivity						
	Mean (95% CI)	NaN% (0%, 100%)	NaN% (0%, 100%)	NaN% (0%, 100%)	NaN% (0%, 100%)	NaN% (0%, 100%)
Efficiency						
	Mean (95% CI)	80% (79.3%, 80.6%)	80% (79.3%, 80.6%)	80% (79.3%, 80.6%)	89.9% (89.4%, 90.4%)	89.8% (89.3%, 90.3%)
	Median (Q1, Q3)	80% (80%, 80%)	80% (80%, 80%)	80% (80%, 80%)	90% (90%, 90%)	90% (90%, 90%)
	Min, Max	79%, 80%	76%, 80%	76%, 80%	84%, 90%	76%, 90%
Rounds						
	Mean (95% CI)	1 (1, 1)	1 (1, 1)	1 (1, 1)	1 (1, 1.1)	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, 2	1, 2	1, 2	1, 4	1, 9

TABLE 3 Hypred Mid Tier, AGAIG, SD=0 ME=0.5, est betas

		Linreg	MSS	LRSOE	MiniCov	Mini
Sensitivity						
	Mean (95% CI)	0% (0%, 30.8%)	0% (0%, 30.8%)	0% (0%, 30.8%)	0% (0%, 30.8%)	0% (0%, 30.8%)
Efficiency						
	Mean (95% CI)	80% (79.3%, 80.6%)	80% (79.3%, 80.6%)	80% (79.3%, 80.6%)	89.8% (89.3%, 90.3%)	89.5% (89%, 90%)
	Median (Q1, Q3)	80% (80%, 80%)	80% (80%, 80%)	80% (80%, 80%)	90% (90%, 90%)	90% (90%, 90%)
	Min, Max	79%, 80%	75%, 80%	74%, 80%	68%, 90%	56%, 90%
Rounds						
	Mean (95% CI)	1 (1, 1)	1 (1, 1)	1 (1, 1)	1.1 (1, 1.3)	1.2 (1, 1.5)
	Median (Q1, Q3)	1 (1, 1)	1 (1, 1)	1 (1, 1)	1 (1, 1)	1 (1, 1)
	Min, Max	1, 2	1, 2	1, 2	1, 11	1, 11

All methods have 0 mean sensitivity due to measurement error. We had 0 true failures, but 10 observable failures when we add the ME.

TABLE 4 Hypred Mid Tier, AGAIG, SD=0 ME=0.75, est betas

		Linreg	MSS	LRSOE	MiniCov	Mini
Sensitivity						
	Mean (95% CI)	0% (0%, 10.9%)	0% (0%, 10.9%)	0% (0%, 10.9%)	28.1% (13.7%, 46.7%)	6.2% (0.8%, 20.8%)
Efficiency						
	Mean (95% CI)	80% (79.3%, 80.6%)	80% (79.3%, 80.6%)	79.9% (79.3%, 80.6%)	89.3% (88.8%, 89.8%)	88.8% (88.2%, 89.3%)
	Median (Q1, Q3)	80% (80%, 80%)	80% (80%, 80%)	80% (80%, 80%)	90% (90%, 90%)	90% (90%, 90%)
	Min, Max	79%, 80%	75%, 80%	71%, 80%	43%, 90%	26%, 90%
Rounds						
	Mean (95% CI)	1 (1, 1)	1 (1, 1)	1 (1, 1)	1.3 (1, 1.5)	1.4 (1.1, 1.7)
	Median (Q1, Q3)	1 (1, 1)	1 (1, 1)	1 (1, 1)	1 (1, 1)	1 (1, 1)
	Min, Max	1, 2	1, 2	1, 2	1, 11	1, 11

Here we had 0 true failures and 32 observable failures when including ME.

TABLE 5 Hypred Mid Tier, AGAIG, SD=1 ME=0.05, est betas

		Linreg	MSS	LRSOE	MiniCov	Mini
Sensitivity						
	Mean (95% CI)	91.9% (88.1%, 94.9%)	92.7% (88.9%, 95.5%)	94.5% (91.1%, 96.9%)	99.6% (98%, 100%)	98.9% (96.8%, 99.8%)
Efficiency						
	Mean (95% CI)	76.9% (76.2%, 77.6%)	76.2% (75.5%, 76.9%)	76.3% (75.6%, 77%)	78.4% (77.8%, 79.1%)	75.6% (74.9%, 76.3%)
	Median (Q1, Q3)	77% (76%, 79%)	76% (75%, 78%)	77% (75%, 79%)	78% (75%, 84%)	76.5% (71%, 83%)
	Min, Max	63%, 80%	65%, 80%	67%, 80%	58%, 90%	50%, 90%
Rounds						
	Mean (95% CI)	2.6 (2.5, 2.8)	2.2 (2.1, 2.3)	2.2 (2.1, 2.3)	7.3 (6.8, 7.7)	8.1 (7.7, 8.5)
	Median (Q1, Q3)	3 (2, 3)	2 (2, 3)	2 (2, 2.75)	8 (5, 9.75)	9 (6, 10)
	Min, Max	1, 6	1, 5	1, 5	1, 11	1, 11

TABLE 6 Hypred Mid Tier, AGAIG, SD=1 ME=0.12, est betas

		Linreg	MSS	LRSOE	MiniCov	Mini
Sensitivity						
	Mean (95% CI)	85.7% (81.1%, 89.6%)	86.1% (81.5%, 89.9%)	88.9% (84.7%, 92.4%)	96.1% (93.1%, 98%)	95.7% (92.6%, 97.8%)
Efficiency						
	Mean (95% CI)	76.7% (76%, 77.4%)	76% (75.4%, 76.7%)	76% (75.3%, 76.7%)	76.1% (75.4%, 76.8%)	73.6% (72.9%, 74.3%)
	Median (Q1, Q3)	77% (75%, 79%)	76% (75%, 78%)	76% (75%, 78%)	76.5% (71%, 82.7%)	75.5% (67%, 81%)
	Min, Max	64%, 80%	66%, 80%	65%, 80%	50%, 90%	45%, 90%
Rounds						
	Mean (95% CI)	2.7 (2.6, 2.9)	2.2 (2.1, 2.4)	2.2 (2.1, 2.3)	8.2 (7.7, 8.7)	8.8 (8.4, 9.2)
	Median (Q1, Q3)	3 (2, 3)	2 (2, 3)	2 (2, 3)	9 (6, 11)	9 (7, 11)
	Min, Max	1, 6	1, 4	1, 4	1, 11	1, 11

TABLE 7 Hypred Mid Tier, AGAIG, SD=1 ME=0.25, est betas

		Linreg	MSS	LRSOE	MiniCov	Mini
Sensitivity						
	Mean (95% CI)	73.1% (67.8%, 78%)	74.8% (69.5%, 79.5%)	75.1% (69.9%, 79.8%)	91.6% (87.9%, 94.4%)	90.3% (86.4%, 93.4%)
Efficiency						
	Mean (95% CI)	76.4% (75.7%, 77.1%)	75.6% (74.9%, 76.3%)	75.4% (74.7%, 76.1%)	71.8% (71.1%, 72.5%)	70% (69.2%, 70.7%)
	Median (Q1, Q3)	77% (75%, 79%)	76% (74%, 77.8%)	76% (74%, 78%)	73% (66%, 79%)	71% (63%, 78%)
	Min, Max	62%, 80%	62%, 80%	60%, 80%	42%, 90%	36%, 90%
Rounds						
	Mean (95% CI)	3 (2.8, 3.2)	2.3 (2.2, 2.5)	2.3 (2.2, 2.4)	9.3 (8.8, 9.7)	9.5 (9.2, 9.9)
	Median (Q1, Q3)	3 (2, 4)	2 (2, 3)	2 (2, 3)	11 (8, 11)	11 (8, 11)
	Min, Max	1, 7	1, 6	1, 5	1, 11	1, 11

TABLE 8 Hypred Mid Tier, AGAIG, SD=1 ME=0.5, est betas

		Linreg	MSS	LRSOE	MiniCov	Mini
Sensitivity						
	Mean (95% CI)	47.8% (43%, 52.6%)	48.7% (43.9%, 53.5%)	51.5% (46.7%, 56.3%)	75.8% (71.4%, 79.7%)	76.7% (72.4%, 80.6%)
Efficiency						
	Mean (95% CI)	75.6% (74.9%, 76.2%)	74.5% (73.8%, 75.2%)	74.3% (73.6%, 75%)	64.2% (63.4%, 65%)	63% (62.2%, 63.8%)
	Median (Q1, Q3)	76.5% (73.2%, 79%)	75% (73%, 77%)	75% (72%, 77%)	65% (56.2%, 72%)	64% (55%, 70%)
	Min, Max	58%, 80%	53%, 80%	54%, 80%	20%, 89%	28%, 85%
Rounds						
	Mean (95% CI)	3.5 (3.2, 3.8)	2.6 (2.4, 2.7)	2.6 (2.4, 2.7)	10.4 (10.1, 10.6)	10.3 (10.1, 10.5)
	Median (Q1, Q3)	3 (2, 5)	2 (2, 3)	2 (2, 3)	11 (11, 11)	11 (11, 11)
	Min, Max	1, 9	1, 8	1, 6	2, 11	5, 11