Appendix B

Appendix B

Table S1. *Area under the curve (AUC), standard deviation (SD), and 95% confidence intervals (CI) across MABF methods (one-sided test) by replication sample size (n_{rep}) and number of replications (N_{rep}), for true effect size $\theta = 0.2$.*

		BFbMA			EUBF			FEMABF			iBF			REMA		
N_{rep}	n_{rep}	AUC	SD	95% CI	AUC	SD	95% CI	AUC	SD	95% CI	AUC	SD	95% CI	AUC	SD	95% CI
40	2	0.691	0.018	0.691 – 0.692	0.810	0.009	0.810 – 0.810	0.813	0.009	0.812 – 0.813	0.813	0.009	0.812 – 0.813	0.719	0.031	0.719 – 0.720
40	5	0.839	0.016	0.839 – 0.840	0.909	0.008	0.909 – 0.910	0.912	0.008	0.912 – 0.912	0.912	0.008	0.912 – 0.912	0.851	0.019	0.851 – 0.852
40	10	0.932	0.011	0.932 – 0.933	0.963	0.005	0.963 – 0.963	0.964	0.005	0.964 – 0.964	0.964	0.005	0.964 – 0.964	0.936	0.011	0.936 – 0.936
100	2	0.834	0.016	0.833 – 0.834	0.908	0.008	0.908 – 0.908	0.912	0.008	0.912 – 0.912	0.912	0.008	0.912 – 0.912	0.849	0.022	0.848 – 0.849
100	5	0.950	0.009	0.950 – 0.950	0.973	0.004	0.973 – 0.973	0.975	0.004	0.975 – 0.975	0.975	0.004	0.975 – 0.975	0.953	0.009	0.953 – 0.954
100	10	0.987	0.004	0.986 – 0.987	0.993	0.002	0.993 – 0.993	0.993	0.002	0.993 – 0.993	0.993	0.002	0.993 – 0.993	0.987	0.004	0.987 – 0.987
400	2	0.974	0.006	0.974 – 0.974	0.987	0.003	0.987 – 0.987	0.990	0.002	0.990 – 0.990	0.990	0.002	0.990 – 0.990	0.977	0.007	0.977 – 0.977
400	5	0.996	0.002	0.996 – 0.996	0.998	0.001	0.998 – 0.998	0.998	0.001	0.998 – 0.998	0.998	0.001	0.998 – 0.998	0.997	0.002	0.997 – 0.997
400	10	0.998	0.002	0.998 – 0.998	0.999	0.000	0.999 – 0.999	0.999	0.000	0.999 – 0.999	0.999	0.000	0.999 – 0.999	0.999	0.001	0.999 – 0.999

Table S2. *Area under the curve (AUC), standard deviation (SD), and 95% confidence intervals (CI) across MABF methods (one-sided test) by replication sample size (n_{rep}) and number of replications (N_{rep}), for true effect size $\theta = 0.5$.*

		BFbMA			EUBF			FEMABF			iBF			REMA		
N_{rep}	n_{rep}	AUC	SD	95% CI	AUC	SD	95% CI	AUC	SD	95% CI	AUC	SD	95% CI	AUC	SD	95% CI
40	2	0.934	0.009	0.934 – 0.934	0.973	0.004	0.973 – 0.973	0.976	0.004	0.976 – 0.976	0.976	0.004	0.976 – 0.976	0.951	0.011	0.951 – 0.952
40	5	0.991	0.003	0.991 – 0.991	0.996	0.001	0.996 – 0.996	0.997	0.001	0.996 – 0.997	0.997	0.001	0.996 – 0.997	0.993	0.003	0.993 – 0.993
40	10	0.998	0.001	0.998 – 0.998	0.999	0.001	0.999 – 0.999	0.999	0.001	0.999 – 0.999	0.999	0.001	0.999 – 0.999	0.999	0.001	0.999 – 0.999
100	2	0.985	0.003	0.985 – 0.986	0.996	0.002	0.995 – 0.996	0.997	0.001	0.997 – 0.997	0.997	0.001	0.997 – 0.997	0.992	0.004	0.992 – 0.992
100	5	0.999	0.001	0.999 – 0.999	1.000	0.000	1.000 – 1.000	1.000	0.000	1.000 – 1.000	1.000	0.000	1.000 – 1.000	0.999	0.001	0.999 – 0.999
100	10	0.999	0.002	0.999 – 0.999	1.000	0.000	1.000 – 1.000	1.000	0.000	1.000 – 1.000	1.000	0.000	1.000 – 1.000	1.000	0.000	1.000 – 1.000
400	2	0.998	0.001	0.998 – 0.998	1.000	0.000	1.000 – 1.000	1.000	0.000	1.000 – 1.000	1.000	0.000	1.000 – 1.000	1.000	0.001	1.000 – 1.000
400	5	0.998	0.005	0.998 – 0.999	1.000	0.000	1.000 – 1.000	1.000	0.000	1.000 – 1.000	1.000	0.000	1.000 – 1.000	1.000	0.000	1.000 – 1.000
400	10	0.992	0.030	0.991 – 0.993	1.000	0.000	1.000 – 1.000	1.000	0.000	1.000 – 1.000	1.000	0.000	1.000 – 1.000	1.000	0.000	1.000 – 1.000

Table S3. *Area under the curve (AUC), standard deviation (SD), and 95% confidence intervals (CI) across MABF methods (two-sided test) by replication sample size (n_{rep}) and number of replications (N_{rep}), for true effect size $\theta = 0.2$.*

		BFbMA			EUBF			FEMABF			iBF			REMA		
N_{rep}	n_{rep}	AUC	SD	95% CI	AUC	SD	95% CI	AUC	SD	95% CI	AUC	SD	95% CI	AUC	SD	95% CI
40	2	0.693	0.018	0.693 – 0.694	0.697	0.018	0.697 – 0.698	0.702	0.018	0.702 – 0.703	0.702	0.018	0.702 – 0.703	0.719	0.031	0.719 – 0.720
40	5	0.839	0.016	0.838 – 0.839	0.841	0.016	0.840 – 0.841	0.846	0.016	0.845 – 0.846	0.846	0.016	0.845 – 0.846	0.851	0.019	0.851 – 0.852
40	10	0.932	0.011	0.932 – 0.932	0.933	0.011	0.933 – 0.933	0.935	0.010	0.935 – 0.935	0.935	0.010	0.935 – 0.935	0.936	0.011	0.936 – 0.936
100	2	0.835	0.017	0.834 – 0.835	0.839	0.016	0.838 – 0.839	0.847	0.016	0.846 – 0.847	0.847	0.016	0.846 – 0.847	0.849	0.022	0.848 – 0.849
100	5	0.950	0.009	0.950 – 0.950	0.950	0.009	0.950 – 0.950	0.954	0.009	0.954 – 0.955	0.954	0.009	0.954 – 0.955	0.953	0.009	0.953 – 0.954
100	10	0.987	0.004	0.986 – 0.987	0.987	0.004	0.986 – 0.987	0.988	0.004	0.988 – 0.988	0.988	0.004	0.988 – 0.988	0.987	0.004	0.987 – 0.987
400	2	0.974	0.006	0.974 – 0.975	0.976	0.005	0.976 – 0.976	0.981	0.005	0.981 – 0.981	0.981	0.005	0.981 – 0.981	0.977	0.007	0.977 – 0.977
400	5	0.996	0.002	0.996 – 0.996	0.996	0.002	0.996 – 0.996	0.997	0.002	0.997 – 0.997	0.997	0.002	0.997 – 0.997	0.997	0.002	0.997 – 0.997
400	10	0.998	0.002	0.998 – 0.998	0.999	0.001	0.999 – 0.999	0.999	0.001	0.999 – 0.999	0.999	0.001	0.999 – 0.999	0.999	0.001	0.999 – 0.999

Table S4. *Area under the curve (AUC), standard deviation (SD), and 95% confidence intervals (CI) across MABF methods (two-sided test) by replication sample size (n_{rep}) and number of replications (N_{rep}), for true effect size $\theta = 0.5$.*

		BFbMA			EUBF			FEMABF			iBF			REMA		
N_{rep}	n_{rep}	AUC	SD	95% CI	AUC	SD	95% CI	AUC	SD	95% CI	AUC	SD	95% CI	AUC	SD	95% CI
40	2	0.939	0.009	0.939 – 0.940	0.949	0.008	0.949 – 0.949	0.955	0.008	0.955 – 0.955	0.955	0.008	0.955 – 0.955	0.951	0.011	0.951 – 0.952
40	5	0.991	0.003	0.991 – 0.991	0.992	0.003	0.992 – 0.992	0.993	0.003	0.993 – 0.994	0.993	0.003	0.993 – 0.994	0.993	0.003	0.993 – 0.993
40	10	0.998	0.001	0.998 – 0.998	0.999	0.001	0.999 – 0.999	0.999	0.001	0.999 – 0.999	0.999	0.001	0.999 – 0.999	0.999	0.001	0.999 – 0.999
100	2	0.987	0.003	0.987 – 0.987	0.992	0.003	0.991 – 0.992	0.994	0.002	0.994 – 0.994	0.994	0.002	0.994 – 0.994	0.992	0.004	0.992 – 0.992
100	5	0.999	0.001	0.999 – 0.999	0.999	0.001	0.999 – 0.999	0.999	0.001	0.999 – 0.999	0.999	0.001	0.999 – 0.999	0.999	0.001	0.999 – 0.999
100	10	0.999	0.002	0.999 – 0.999	1.000	0.000	1.000 – 1.000	1.000	0.000	1.000 – 1.000	1.000	0.000	1.000 – 1.000	1.000	0.000	1.000 – 1.000
400	2	0.998	0.001	0.998 – 0.998	1.000	0.001	1.000 – 1.000	1.000	0.001	1.000 – 1.000	1.000	0.001	1.000 – 1.000	1.000	0.001	1.000 – 1.000
400	5	0.998	0.005	0.998 – 0.999	1.000	0.000	1.000 – 1.000	1.000	0.000	1.000 – 1.000	1.000	0.000	1.000 – 1.000	1.000	0.000	1.000 – 1.000
400	10	0.992	0.031	0.991 – 0.993	1.000	0.000	1.000 – 1.000	1.000	0.000	1.000 – 1.000	1.000	0.000	1.000 – 1.000	1.000	0.000	1.000 – 1.000

Table S5. *Proportions of anecdotal evidence, false positives, and true negatives across MABF methods (one-sided test) when* $\theta = 0$.

		BFbMA			EUBF			FEMABF			iBF		
N_{rep}	n_{rep}	AD (%)	TN (%)	FP (%)	AD (%)	TN (%)	FP (%)	AD (%)	TN (%)	FP (%)	AD (%)	TN (%)	FP (%)
2	40	96.48	0.00	3.52	19.12	80.08	0.80	22.29	76.14	1.57	22.26	76.20	1.54
	100	93.85	0.00	6.15	10.63	88.78	0.59	13.82	85.01	1.17	13.80	85.04	1.16
	400	92.93	0.00	7.07	5.11	94.44	0.45	7.39	91.70	0.92	7.39	91.70	0.91
5	40	93.89	0.00	6.11	8.48	91.26	0.25	13.74	85.09	1.18	13.68	85.16	1.16
	100	92.88	0.00	7.12	4.60	95.23	0.18	8.93	90.14	0.93	8.91	90.16	0.92
	400	73.82	18.39	7.79	2.80	96.96	0.24	6.11	92.74	1.14	6.11	92.75	1.14
10	40	92.77	0.00	7.23	4.61	95.27	0.12	9.90	89.12	0.98	9.85	89.19	0.96
	100	92.48	0.00	7.52	2.72	97.17	0.10	6.92	92.16	0.92	6.90	92.19	0.91
	400	53.04	36.86	10.10	2.58	97.11	0.30	6.20	91.91	1.90	6.19	91.91	1.89

Note. For this analysis, Bayes factors satisfying $\frac{1}{3} \leq BF_{10} \leq 3$ were classified as anecdotal evidence.

Table S6. *Proportions of anecdotal evidence, true positives, and false negatives across MABF methods (one-sided test) when* $\theta = 0.2$.

		BFbMA			EUBF			FEMABF			iBF		
N_{rep}	n_{rep}	AD (%)	TP (%)	FN (%)	AD (%)	TP (%)	FN (%)	AD (%)	TP (%)	FN (%)	AD (%)	TP (%)	FN (%)
2	40	80.90	19.10	0.00	52.98	12.70	34.32	50.73	20.04	29.23	50.84	19.86	29.30
	100	50.27	49.73	0.00	47.02	28.04	24.94	40.82	40.39	18.80	40.88	40.29	18.83
	400	9.67	90.33	0.00	18.99	75.24	5.77	10.48	86.32	3.20	10.49	86.31	3.20
5	40	48.58	51.42	0.00	51.61	19.53	28.86	40.97	40.12	18.91	41.14	39.88	18.99
	100	16.49	83.51	0.00	37.83	48.54	13.63	20.64	72.39	6.97	20.70	72.31	6.99
	400	0.99	98.98	0.03	5.45	93.19	1.36	1.52	97.94	0.53	1.53	97.94	0.53
10	40	21.15	78.85	0.00	45.66	36.15	18.18	26.16	64.42	9.42	26.34	64.19	9.47
	100	4.11	95.89	0.00	20.16	74.51	5.32	7.02	90.86	2.12	7.05	90.83	2.12
	400	0.20	99.77	0.03	1.16	98.46	0.39	0.28	99.56	0.17	0.28	99.56	0.17

Note. For this analysis, Bayes factors satisfying $\frac{1}{3} \leq BF_{10} \leq 3$ were classified as anecdotal evidence.

Table S7. *Proportions of anecdotal evidence, true positives, and false negatives across MABF methods (one-sided test) when* $\theta = 0.5$.

		BFbMA			EUBF			FEMABF			iBF		
N_{rep}	n_{rep}	AD (%)	TP (%)	FN (%)	AD (%)	TP (%)	FN (%)	AD (%)	TP (%)	FN (%)	AD (%)	TP (%)	FN (%)
2	40	30.90	69.10	0.00	29.42	67.20	3.38	18.57	78.95	2.49	18.72	78.79	2.49
	100	6.66	93.34	0.00	7.99	91.14	0.87	3.59	95.88	0.52	3.61	95.87	0.53
	400	0.18	99.82	0.00	0.37	99.55	0.07	0.12	99.83	0.04	0.12	99.83	0.04
5	40	3.49	96.51	0.00	10.49	88.43	1.07	3.63	95.83	0.54	3.67	95.79	0.54
	100	0.28	99.72	0.00	1.51	98.29	0.20	0.40	99.50	0.09	0.41	99.50	0.09
	400	0.02	99.98	0.00	0.05	99.93	0.03	0.02	99.97	0.02	0.02	99.97	0.02
10	40	0.41	99.59	0.00	2.68	97.00	0.32	0.71	99.15	0.14	0.72	99.14	0.14
	100	0.05	99.95	0.00	0.28	99.65	0.06	0.07	99.89	0.03	0.08	99.89	0.03
	400	0.01	99.99	0.00	0.01	99.97	0.02	0.01	99.98	0.01	0.01	99.98	0.01

Note. For this analysis, Bayes factors satisfying $\frac{1}{3} \leq BF_{10} \leq 3$ were classified as anecdotal evidence.

Table S8. *Proportions of anecdotal evidence, false positives, and true negatives across MABF methods (two-sided test) when* $\theta = 0$.

		BFbMA			EUBF			FEMABF			iBF		
N_{rep}	n_{rep}	AD (%)	TN (%)	FP (%)	AD (%)	TN (%)	FP (%)	AD (%)	TN (%)	FP (%)	AD (%)	TN (%)	FP (%)
2	40	99.39	0.00	0.61	16.35	82.99	0.67	22.39	76.22	1.39	22.28	76.36	1.37
	100	98.09	0.00	1.91	8.65	90.86	0.49	13.01	85.93	1.06	12.97	85.98	1.05
	400	96.86	0.00	3.14	4.35	95.25	0.41	7.13	91.99	0.88	7.12	92.00	0.87
5	40	98.17	0.00	1.83	5.78	94.04	0.18	13.06	85.88	1.06	12.96	85.99	1.04
	100	97.23	0.00	2.77	3.18	96.69	0.13	8.46	90.69	0.86	8.42	90.73	0.85
	400	54.28	41.68	4.04	2.26	97.53	0.21	6.36	92.44	1.20	6.36	92.45	1.20
10	40	97.33	0.00	2.67	2.80	97.13	0.07	9.27	89.84	0.89	9.19	89.94	0.87
	100	96.62	0.00	3.38	1.80	98.13	0.07	6.79	92.30	0.90	6.77	92.34	0.90
	400	33.93	60.04	6.04	2.27	97.47	0.27	7.17	90.61	2.22	7.17	90.62	2.22

Note. For this analysis, Bayes factors satisfying $\frac{1}{3} \leq BF_{10} \leq 3$ were classified as anecdotal evidence.

Table S9. *Proportions of anecdotal evidence, true positives, and false negatives across MABF methods (two-sided test) when* $\theta = 0.2$.

		BFbMA			EUBF			FEMABF			iBF		
N_{rep}	n_{rep}	AD (%)	TP (%)	FN (%)	AD (%)	TP (%)	FN (%)	AD (%)	TP (%)	FN (%)	AD (%)	TP (%)	FN (%)
2	40	93.06	6.94	0.00	38.50	7.35	54.15	42.16	12.72	45.12	42.17	12.56	45.27
	100	66.74	33.26	0.00	39.29	19.74	40.97	38.36	30.82	30.82	38.41	30.72	30.88
	400	16.34	83.66	0.00	20.92	68.47	10.60	12.49	81.88	5.63	12.50	81.86	5.63
5	40	66.67	33.33	0.00	39.84	12.34	47.82	38.48	30.52	31.00	38.59	30.27	31.14
	100	27.18	72.82	0.00	36.94	38.56	24.50	22.93	64.95	12.12	23.00	64.85	12.15
	400	1.71	98.20	0.09	6.91	90.56	2.53	1.93	97.20	0.87	1.93	97.20	0.87
10	40	33.92	66.08	0.00	41.64	26.10	32.26	27.93	55.85	16.22	28.10	55.57	16.33
	100	7.23	92.77	0.00	23.25	66.66	10.09	8.59	87.71	3.70	8.62	87.67	3.71
	400	0.28	99.65	0.07	1.52	97.85	0.63	0.34	99.43	0.23	0.34	99.43	0.23

Note. For this analysis, Bayes factors satisfying $\frac{1}{3} \leq BF_{10} \leq 3$ were classified as anecdotal evidence.

Table S10. *Proportions of anecdotal evidence, true positives, and false negatives across MABF methods (two-sided test) when* $\theta = 0.5$.

		BFbMA			EUBF			FEMABF			iBF		
N_{rep}	n_{rep}	AD (%)	TP (%)	FN (%)	AD (%)	TP (%)	FN (%)	AD (%)	TP (%)	FN (%)	AD (%)	TP (%)	FN (%)
2	40	48.35	51.65	0.00	34.50	56.88	8.63	23.37	71.05	5.58	23.55	70.84	5.61
	100	12.61	87.39	0.00	10.63	87.17	2.20	4.89	93.97	1.14	4.91	93.95	1.14
	400	0.48	99.52	0.00	0.53	99.33	0.14	0.16	99.77	0.07	0.16	99.77	0.07
5	40	8.03	91.97	0.00	14.14	83.08	2.78	4.95	93.88	1.17	5.00	93.83	1.18
	100	0.62	99.38	0.00	2.15	97.40	0.45	0.55	99.28	0.17	0.56	99.27	0.17
	400	0.03	99.97	0.01	0.06	99.90	0.04	0.02	99.96	0.02	0.02	99.96	0.02
10	40	0.87	99.13	0.00	3.83	95.41	0.76	0.97	98.76	0.27	0.98	98.75	0.27
	100	0.09	99.91	0.00	0.40	99.48	0.12	0.10	99.86	0.05	0.10	99.86	0.05
	400	0.01	99.98	0.01	0.01	99.96	0.02	0.01	99.98	0.02	0.01	99.98	0.02

Note. For this analysis, Bayes factors satisfying $\frac{1}{3} \leq BF_{10} \leq 3$ were classified as anecdotal evidence.

Table S11. *Replication success measures (AD, TS, FF, TF, FS) across MABF methods (one-sided test) by replication sample size (n_{rep}) and number of replications (N_{rep}) for true effect size $\theta = 0$, grouped by bias mechanism level.*

		BFbMA					EUBF					FEMABF					iBF				
N_{rep}	n_{rep}	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)
Bias level: low																					
2	40	96.53	0.00	0.00	3.40	0.06	18.96	78.92	1.36	0.74	0.02	22.13	75.07	1.29	1.47	0.03	22.09	75.13	1.29	1.45	0.03
	100	93.97	0.00	0.00	5.92	0.11	10.36	87.57	1.52	0.54	0.01	13.52	83.95	1.45	1.07	0.02	13.50	83.97	1.45	1.06	0.02
	400	93.16	0.00	0.00	6.70	0.14	4.69	93.32	1.60	0.38	0.01	6.87	90.79	1.54	0.77	0.03	6.87	90.80	1.54	0.77	0.03
5	40	94.00	0.00	0.00	5.89	0.11	8.23	89.97	1.55	0.23	0.00	13.42	84.04	1.44	1.07	0.03	13.37	84.11	1.44	1.05	0.03
	100	93.08	0.00	0.00	6.79	0.13	4.29	93.92	1.63	0.15	0.01	8.49	89.16	1.52	0.80	0.02	8.47	89.19	1.52	0.79	0.02
	400	74.11	18.14	0.30	7.26	0.18	2.38	95.81	1.63	0.17	0.01	5.41	92.15	1.52	0.87	0.05	5.40	92.15	1.52	0.87	0.05
10	40	92.93	0.00	0.00	6.93	0.14	4.34	93.92	1.63	0.11	0.00	9.49	88.12	1.51	0.86	0.03	9.44	88.18	1.51	0.84	0.03
	100	92.73	0.00	0.00	7.10	0.16	2.44	95.82	1.65	0.08	0.00	6.37	91.31	1.54	0.76	0.03	6.35	91.33	1.54	0.74	0.03
	400	53.28	36.59	0.58	9.27	0.27	2.05	96.13	1.61	0.19	0.03	5.31	91.79	1.47	1.33	0.10	5.30	91.80	1.47	1.33	0.10
Bias level: medium																					
2	40	96.49	0.00	0.00	2.96	0.56	19.25	67.23	12.70	0.67	0.14	22.44	63.93	12.06	1.30	0.27	22.41	63.98	12.07	1.28	0.26
	100	93.86	0.00	0.00	5.16	0.98	10.73	74.59	14.09	0.50	0.10	13.93	71.44	13.45	0.98	0.20	13.91	71.47	13.45	0.96	0.20
	400	92.85	0.00	0.00	6.01	1.14	5.21	79.30	15.01	0.38	0.09	7.54	77.00	14.51	0.76	0.18	7.54	77.00	14.51	0.76	0.18
5	40	93.91	0.00	0.00	5.13	0.96	8.55	76.65	14.54	0.21	0.05	13.83	71.49	13.49	0.98	0.20	13.78	71.55	13.51	0.96	0.20
	100	92.84	0.00	0.00	6.02	1.14	4.69	79.97	15.16	0.15	0.03	9.06	75.73	14.25	0.78	0.17	9.05	75.75	14.26	0.77	0.17
	400	73.93	15.17	2.89	6.73	1.28	2.95	81.36	15.42	0.21	0.05	6.28	77.88	14.60	0.99	0.24	6.28	77.89	14.60	0.99	0.24
10	40	92.75	0.00	0.00	6.11	1.15	4.67	80.00	15.20	0.10	0.03	10.00	74.87	14.13	0.82	0.18	9.95	74.93	14.14	0.80	0.17
	100	92.37	0.00	0.00	6.41	1.23	2.79	81.61	15.49	0.09	0.03	7.05	77.42	14.57	0.77	0.19	7.03	77.44	14.57	0.76	0.19
	400	53.27	30.34	5.80	8.91	1.68	2.79	81.45	15.42	0.28	0.07	6.45	77.11	14.37	1.66	0.42	6.44	77.11	14.37	1.66	0.42
Bias level: high																					
2	40	96.50	0.00	0.00	2.26	1.24	19.56	51.44	28.17	0.52	0.32	22.77	48.89	26.72	1.01	0.61	22.73	48.93	26.74	1.00	0.60
	100	93.87	0.00	0.00	3.97	2.16	11.05	57.06	31.26	0.39	0.24	14.33	54.60	29.83	0.77	0.47	14.31	54.62	29.84	0.76	0.46
	400	92.96	0.00	0.00	4.53	2.51	5.54	60.70	33.26	0.30	0.20	7.93	58.92	32.14	0.60	0.41	7.93	58.92	32.14	0.60	0.41
5	40	93.92	0.00	0.00	3.91	2.17	8.88	58.66	32.20	0.17	0.10	14.26	54.63	29.86	0.77	0.48	14.20	54.68	29.89	0.76	0.47
	100	92.92	0.00	0.00	4.57	2.51	4.91	61.23	33.66	0.12	0.08	9.46	57.91	31.61	0.62	0.40	9.44	57.93	31.62	0.62	0.39
	400	73.92	11.82	6.55	4.98	2.73	3.13	62.35	34.24	0.15	0.12	6.79	59.54	32.38	0.76	0.53	6.78	59.55	32.38	0.76	0.53
10	40	92.82	0.00	0.00	4.64	2.54	4.92	61.26	33.69	0.09	0.05	10.44	57.23	31.27	0.66	0.41	10.39	57.27	31.29	0.64	0.41
	100	92.54	0.00	0.00	4.81	2.65	3.01	62.50	34.38	0.07	0.04	7.50	59.20	32.28	0.61	0.42	7.48	59.21	32.29	0.60	0.42
	400	53.19	23.70	13.16	6.44	3.51	2.97	62.44	34.24	0.20	0.15	6.99	58.96	31.86	1.27	0.92	6.98	58.97	31.86	1.27	0.92

Table S12. *Replication success measures (AD, TS, FF, TF, FS) across MABF methods (one-sided test) by replication sample size (n_{rep}) and number of replications (N_{rep}) for true effect size $\theta = 0$, grouped by original study significance level.*

		BFbMA					EUBF					FEMABF					iBF				
N_{rep}	n_{rep}	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)
$\alpha = 0.01$																					
2	40	96.49	0.00	0.00	3.30	0.22	19.17	75.11	4.92	0.74	0.06	22.35	71.42	4.67	1.46	0.11	22.31	71.48	4.67	1.44	0.11
	100	93.86	0.00	0.00	5.74	0.39	10.66	83.29	5.45	0.55	0.04	13.86	79.77	5.21	1.09	0.08	13.84	79.80	5.21	1.08	0.08
	400	92.94	0.00	0.00	6.59	0.46	5.12	88.63	5.80	0.42	0.04	7.41	86.08	5.59	0.84	0.08	7.41	86.08	5.59	0.83	0.08
5	40	93.91	0.00	0.00	5.71	0.38	8.51	85.61	5.63	0.23	0.02	13.77	79.83	5.22	1.09	0.09	13.72	79.89	5.23	1.07	0.08
	100	92.90	0.00	0.00	6.64	0.46	4.61	89.34	5.87	0.16	0.02	8.95	84.61	5.51	0.86	0.07	8.94	84.63	5.51	0.85	0.07
	400	73.87	17.23	1.13	7.25	0.52	2.81	90.99	5.96	0.21	0.03	6.13	87.11	5.61	1.03	0.11	6.13	87.12	5.61	1.03	0.11
10	40	92.79	0.00	0.00	6.76	0.45	4.62	89.37	5.89	0.12	0.01	9.92	83.63	5.46	0.91	0.07	9.88	83.70	5.46	0.89	0.07
	100	92.50	0.00	0.00	7.00	0.50	2.73	91.17	5.99	0.09	0.01	6.94	86.53	5.61	0.84	0.09	6.92	86.55	5.61	0.83	0.09
	400	53.11	34.55	2.26	9.40	0.69	2.59	91.17	5.94	0.26	0.04	6.22	86.39	5.49	1.69	0.21	6.21	86.40	5.49	1.69	0.21
$\alpha = 0.05$																					
2	40	96.53	0.00	0.00	2.45	1.02	19.35	56.62	23.23	0.54	0.26	22.55	53.84	22.04	1.07	0.50	22.51	53.89	22.06	1.05	0.49
	100	93.93	0.00	0.00	4.29	1.78	10.77	62.85	25.79	0.40	0.19	14.00	60.22	24.62	0.79	0.38	13.98	60.24	24.62	0.78	0.38
	400	93.03	0.00	0.00	4.90	2.07	5.18	66.92	27.45	0.29	0.17	7.49	65.06	26.53	0.59	0.33	7.48	65.06	26.54	0.59	0.33
5	40	93.98	0.00	0.00	4.24	1.78	8.60	64.59	26.56	0.17	0.08	13.91	60.28	24.64	0.79	0.39	13.85	60.33	24.66	0.78	0.38
	100	92.99	0.00	0.00	4.94	2.07	4.66	67.41	27.76	0.11	0.06	9.05	63.93	26.09	0.61	0.32	9.03	63.95	26.09	0.60	0.32
	400	74.10	12.86	5.36	5.40	2.28	2.83	68.69	28.24	0.14	0.09	6.19	65.93	26.72	0.71	0.43	6.19	65.94	26.72	0.71	0.43
10	40	92.88	0.00	0.00	5.03	2.09	4.67	67.42	27.79	0.08	0.04	10.03	63.18	25.81	0.65	0.33	9.98	63.22	25.83	0.64	0.33
	100	92.60	0.00	0.00	5.21	2.20	2.76	68.78	28.35	0.06	0.04	7.01	65.42	26.65	0.58	0.34	6.99	65.44	26.65	0.58	0.34
	400	53.39	25.87	10.76	7.01	2.96	2.62	68.84	28.24	0.18	0.12	6.28	65.52	26.30	1.15	0.75	6.27	65.52	26.30	1.15	0.75

Table S13. *Replication success measures (AD, TS, FF, TF, FS) across MABF methods (one-sided test) by replication sample size (n_{rep}) and number of replications (N_{rep}) for true effect size $\theta = 0$, grouped by original study sample size.*

		BFbMA					EUBF					FEMABF					iBF				
N_{rep}	n_{rep}	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)
$n_{orig} = 20$																					
2	40	96.48	0.00	0.00	2.97	0.54	19.00	67.81	12.41	0.65	0.14	22.17	64.52	11.78	1.27	0.26	22.12	64.58	11.79	1.25	0.26
	100	93.87	0.00	0.00	5.17	0.96	10.50	75.17	13.75	0.48	0.10	13.66	72.06	13.14	0.94	0.19	13.64	72.08	13.15	0.94	0.19
	400	92.92	0.00	0.00	5.99	1.09	4.96	79.98	14.63	0.35	0.08	7.18	77.76	14.17	0.72	0.16	7.18	77.77	14.17	0.72	0.16
5	40	93.92	0.00	0.00	5.14	0.94	8.36	77.24	14.15	0.21	0.04	13.57	72.12	13.16	0.96	0.19	13.52	72.18	13.17	0.94	0.19
	100	92.92	0.00	0.00	5.99	1.09	4.47	80.58	14.78	0.14	0.03	8.71	76.44	13.95	0.74	0.15	8.70	76.46	13.95	0.74	0.15
	400	73.95	15.37	2.86	6.64	1.19	2.67	82.05	15.04	0.19	0.05	5.84	78.74	14.31	0.89	0.21	5.84	78.74	14.31	0.89	0.21
10	40	92.79	0.00	0.00	6.10	1.10	4.51	80.58	14.80	0.10	0.02	9.69	75.57	13.80	0.79	0.16	9.64	75.62	13.81	0.78	0.16
	100	92.45	0.00	0.00	6.37	1.18	2.62	82.19	15.09	0.08	0.02	6.65	78.21	14.27	0.72	0.17	6.63	78.23	14.27	0.71	0.17
	400	53.17	30.88	5.78	8.62	1.54	2.45	82.21	15.04	0.24	0.06	5.86	78.20	14.13	1.45	0.37	5.85	78.20	14.13	1.45	0.37
$n_{orig} = 50$																					
2	40	96.52	0.00	0.00	2.85	0.63	19.27	65.43	14.51	0.64	0.16	22.47	62.21	13.77	1.25	0.30	22.43	62.26	13.78	1.23	0.30
	100	93.95	0.00	0.00	4.95	1.10	10.66	72.64	16.11	0.47	0.12	13.89	69.56	15.38	0.93	0.23	13.87	69.59	15.38	0.92	0.23
	400	93.08	0.00	0.00	5.64	1.28	5.09	77.33	17.14	0.34	0.10	7.37	75.17	16.59	0.68	0.20	7.36	75.18	16.59	0.68	0.20
5	40	93.99	0.00	0.00	4.90	1.11	8.53	74.64	16.58	0.19	0.06	13.82	69.64	15.39	0.91	0.24	13.77	69.70	15.41	0.89	0.24
	100	93.00	0.00	0.00	5.71	1.29	4.59	77.90	17.34	0.13	0.04	8.96	73.84	16.30	0.70	0.20	8.95	73.86	16.30	0.70	0.20
	400	74.09	15.01	3.35	6.15	1.40	2.72	79.43	17.63	0.15	0.06	6.03	76.20	16.70	0.80	0.26	6.03	76.21	16.70	0.80	0.26
10	40	92.91	0.00	0.00	5.80	1.29	4.60	77.93	17.35	0.10	0.03	9.90	73.01	16.14	0.75	0.21	9.85	73.06	16.15	0.74	0.20
	100	92.66	0.00	0.00	5.99	1.35	2.70	79.52	17.69	0.07	0.03	6.93	75.56	16.64	0.67	0.21	6.92	75.57	16.64	0.66	0.21
	400	53.36	30.15	6.74	7.95	1.80	2.47	79.63	17.63	0.19	0.08	6.10	75.70	16.44	1.30	0.46	6.10	75.71	16.44	1.30	0.46
$n_{orig} = 200$																					
2	40	96.51	0.00	0.00	2.81	0.68	19.51	64.35	15.32	0.64	0.18	22.71	61.16	14.52	1.26	0.35	22.68	61.22	14.53	1.24	0.34
	100	93.87	0.00	0.00	4.92	1.20	10.98	71.40	17.01	0.48	0.14	14.22	68.37	16.20	0.94	0.27	14.21	68.39	16.21	0.93	0.27
	400	92.97	0.00	0.00	5.61	1.43	5.40	76.01	18.09	0.37	0.13	7.79	73.78	17.44	0.74	0.26	7.79	73.78	17.44	0.73	0.26
5	40	93.92	0.00	0.00	4.89	1.19	8.77	73.40	17.57	0.21	0.06	14.12	68.40	16.24	0.96	0.28	14.07	68.46	16.26	0.95	0.27
	100	92.92	0.00	0.00	5.68	1.40	4.84	76.64	18.32	0.14	0.05	9.34	72.52	17.14	0.75	0.24	9.31	72.54	17.15	0.74	0.24
	400	73.92	14.76	3.52	6.19	1.61	3.07	78.04	18.62	0.19	0.07	6.61	74.63	17.49	0.92	0.35	6.60	74.64	17.49	0.92	0.35
10	40	92.80	0.00	0.00	5.77	1.42	4.82	76.67	18.37	0.10	0.03	10.34	71.64	16.98	0.79	0.25	10.29	71.69	16.99	0.78	0.25
	100	92.53	0.00	0.00	5.96	1.51	2.92	78.22	18.73	0.08	0.03	7.34	74.17	17.48	0.75	0.26	7.32	74.19	17.49	0.74	0.26
	400	53.22	29.60	7.01	8.05	2.12	2.89	78.18	18.59	0.23	0.11	6.79	73.96	17.12	1.51	0.61	6.78	73.97	17.13	1.51	0.61

Table S14. *Replication success measures (AD, TS, FF, TF, FS) across MABF methods (one-sided test) by replication sample size (n_{rep}) and number of replications (N_{rep}) for true effect size $\theta = 0.2$, grouped by bias mechanism level.*

		BFbMA					EUBF					FEMABF					iBF				
N_{rep}	n_{rep}	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)
Bias level: low																					
2	40	81.60	4.46	13.94	0.00	0.00	52.34	3.02	9.12	6.77	28.75	50.38	4.71	14.52	5.72	24.68	50.48	4.67	14.39	5.72	24.73
	100	52.02	11.41	36.58	0.00	0.00	46.74	6.72	19.93	4.61	21.98	41.11	9.52	29.09	3.39	16.89	41.18	9.49	29.02	3.40	16.91
	400	11.11	19.77	69.12	0.00	0.00	20.46	17.02	55.62	0.81	6.10	11.84	19.18	64.97	0.40	3.61	11.85	19.18	64.96	0.40	3.61
5	40	50.45	11.79	37.75	0.00	0.00	50.88	4.78	13.71	5.41	25.22	41.25	9.45	28.90	3.44	16.96	41.41	9.39	28.72	3.45	17.03
	100	18.46	18.53	63.01	0.00	0.00	38.56	11.49	34.53	2.23	13.19	22.00	16.44	53.38	1.05	7.13	22.07	16.43	53.31	1.05	7.14
	400	1.41	21.22	77.33	0.00	0.04	6.57	20.43	71.11	0.13	1.76	2.06	21.11	76.06	0.04	0.74	2.06	21.11	76.06	0.04	0.74
10	40	23.27	17.63	59.10	0.00	0.00	45.77	8.77	25.31	3.10	17.05	27.36	14.81	47.08	1.50	9.26	27.52	14.76	46.90	1.50	9.31
	100	5.16	20.79	74.06	0.00	0.00	21.90	17.02	54.51	0.71	5.86	8.21	20.01	69.03	0.25	2.51	8.24	20.00	69.00	0.25	2.51
	400	0.31	21.30	78.35	0.00	0.05	1.65	21.17	76.59	0.03	0.56	0.44	21.27	78.03	0.01	0.24	0.44	21.27	78.03	0.01	0.24
Bias level: medium																					
2	40	80.77	11.92	7.31	0.00	0.00	53.25	7.96	4.83	19.60	14.36	50.95	12.53	7.66	16.59	12.27	51.06	12.42	7.59	16.63	12.30
	100	49.79	30.96	19.25	0.00	0.00	47.15	17.82	10.58	13.72	10.73	40.78	25.48	15.39	10.19	8.17	40.85	25.42	15.35	10.20	8.18
	400	9.23	54.88	35.89	0.00	0.00	18.49	46.77	29.32	2.69	2.72	10.00	52.99	34.03	1.40	1.56	10.02	52.99	34.03	1.41	1.56
5	40	48.01	32.05	19.93	0.00	0.00	51.98	12.45	7.28	15.95	12.33	41.00	25.26	15.30	10.22	8.23	41.17	25.11	15.20	10.26	8.26
	100	15.87	51.20	32.92	0.00	0.00	37.64	30.87	18.42	6.92	6.15	20.21	45.08	28.12	3.37	3.22	20.27	45.03	28.09	3.38	3.22
	400	0.91	59.31	39.75	0.01	0.02	5.04	56.68	37.02	0.54	0.72	1.38	58.88	39.24	0.20	0.31	1.38	58.88	39.24	0.20	0.31
10	40	20.50	48.51	30.99	0.00	0.00	45.77	23.18	13.51	9.50	8.04	25.80	40.30	24.91	4.74	4.25	25.98	40.17	24.81	4.77	4.28
	100	3.80	57.89	38.31	0.00	0.00	19.55	46.61	28.90	2.39	2.55	6.58	55.44	36.02	0.89	1.06	6.61	55.42	36.01	0.90	1.06
	400	0.19	59.63	40.15	0.01	0.03	1.04	59.13	39.47	0.13	0.23	0.25	59.55	40.04	0.05	0.11	0.25	59.55	40.04	0.05	0.11
Bias level: high																					
2	40	80.36	14.32	5.32	0.00	0.00	53.40	9.64	3.52	23.18	10.27	50.92	15.10	5.57	19.64	8.78	51.03	14.97	5.52	19.69	8.80
	100	49.06	36.95	13.99	0.00	0.00	47.22	21.30	7.72	16.14	7.62	40.60	30.46	11.20	11.96	5.79	40.66	30.40	11.17	11.97	5.79
	400	8.69	65.39	25.91	0.00	0.00	18.05	55.73	21.23	3.12	1.88	9.62	63.17	24.60	1.57	1.03	9.63	63.17	24.59	1.58	1.03
5	40	47.34	38.26	14.40	0.00	0.00	52.02	15.00	5.35	18.82	8.81	40.71	30.27	11.16	12.02	5.84	40.88	30.09	11.09	12.07	5.86
	100	15.16	61.02	23.82	0.00	0.00	37.33	36.89	13.40	8.09	4.30	19.74	53.74	20.39	3.90	2.23	19.80	53.69	20.37	3.91	2.23
	400	0.66	70.64	28.68	0.01	0.01	4.73	67.55	26.78	0.51	0.42	1.14	70.19	28.35	0.15	0.17	1.14	70.19	28.35	0.15	0.17
10	40	19.73	57.86	22.41	0.00	0.00	45.50	27.76	9.89	11.16	5.69	25.37	48.07	18.05	5.50	3.01	25.55	47.92	17.98	5.53	3.02
	100	3.38	68.96	27.66	0.00	0.00	19.07	55.56	20.91	2.73	1.73	6.27	66.06	26.02	0.96	0.69	6.30	66.04	26.01	0.96	0.69
	400	0.11	70.96	28.92	0.00	0.01	0.78	70.48	28.53	0.08	0.12	0.14	70.91	28.86	0.03	0.06	0.14	70.91	28.86	0.03	0.06

Table S15. *Replication success measures (AD, TS, FF, TF, FS) across MABF methods (one-sided test) by replication sample size (n_{rep}) and number of replications (N_{rep}) for true effect size $\theta = 0.2$, grouped by original study significance level.*

		BFbMA					EUBF					FEMABF					iBF				
N_{rep}	n_{rep}	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)
$\alpha = 0.01$																					
2	40	80.91	7.22	11.87	0.00	0.00	52.99	4.87	7.83	11.06	23.26	50.74	7.61	12.42	9.33	19.89	50.85	7.55	12.30	9.36	19.94
	100	50.29	18.55	31.16	0.00	0.00	47.03	10.86	17.16	7.54	17.40	40.83	15.44	24.94	5.54	13.25	40.89	15.41	24.88	5.55	13.28
	400	9.67	32.32	58.00	0.00	0.00	19.00	27.90	47.33	1.33	4.45	10.48	31.40	54.92	0.66	2.54	10.50	31.39	54.91	0.66	2.54
5	40	48.60	19.23	32.18	0.00	0.00	51.62	7.67	11.85	8.81	20.04	40.98	15.31	24.80	5.56	13.34	41.15	15.22	24.65	5.59	13.40
	100	16.50	30.32	53.18	0.00	0.00	37.84	18.75	29.79	3.60	10.03	20.65	26.94	45.44	1.70	5.27	20.71	26.92	45.39	1.70	5.29
	400	0.99	34.66	64.32	0.00	0.03	5.45	33.40	59.79	0.21	1.15	1.53	34.47	63.47	0.07	0.47	1.53	34.47	63.47	0.07	0.47
10	40	21.16	28.81	50.03	0.00	0.00	45.67	14.21	21.93	5.06	13.13	26.17	24.18	40.23	2.44	6.98	26.35	24.10	40.08	2.45	7.02
	100	4.11	33.96	61.93	0.00	0.00	20.17	27.90	46.60	1.14	4.19	7.02	32.71	58.15	0.40	1.72	7.05	32.71	58.12	0.40	1.73
	400	0.20	34.79	64.98	0.00	0.03	1.16	34.59	63.87	0.04	0.35	0.28	34.76	64.79	0.01	0.16	0.28	34.76	64.79	0.01	0.16
$\alpha = 0.05$																					
2	40	80.91	13.25	5.84	0.00	0.00	53.00	8.87	3.82	21.97	12.33	50.75	13.95	6.09	18.63	10.59	50.87	13.82	6.03	18.67	10.62
	100	50.30	34.33	15.38	0.00	0.00	47.04	19.70	8.32	15.44	9.49	40.84	28.19	12.18	11.48	7.31	40.90	28.13	12.15	11.50	7.32
	400	9.68	61.04	29.28	0.00	0.00	19.00	51.78	23.45	3.09	2.68	10.49	58.84	27.48	1.60	1.60	10.50	58.83	27.48	1.60	1.60
5	40	48.61	35.51	15.88	0.00	0.00	51.63	13.82	5.70	17.98	10.87	40.99	28.00	12.10	11.55	7.35	41.16	27.84	12.03	11.60	7.37
	100	16.50	56.85	26.65	0.00	0.00	37.85	34.08	14.45	7.89	5.73	20.65	49.90	22.49	3.85	3.11	20.72	49.85	22.46	3.86	3.12
	400	0.99	66.13	32.85	0.01	0.02	5.45	63.05	30.14	0.57	0.79	1.53	65.64	32.30	0.19	0.34	1.53	65.64	32.30	0.19	0.34
10	40	21.17	53.86	24.98	0.00	0.00	45.69	25.60	10.54	10.78	7.39	26.18	44.61	19.80	5.38	4.03	26.35	44.46	19.72	5.42	4.05
	100	4.12	64.47	31.42	0.00	0.00	20.18	51.56	22.95	2.74	2.58	7.02	61.62	29.24	1.00	1.11	7.05	61.60	29.22	1.01	1.12
	400	0.20	66.47	33.30	0.01	0.03	1.16	65.93	32.52	0.12	0.26	0.28	66.40	33.16	0.05	0.12	0.28	66.40	33.16	0.05	0.12

Table S16. *Replication success measures (AD, TS, FF, TF, FS) across MABF methods (one-sided test) by replication sample size (n_{rep}) and number of replications (N_{rep}) for true effect size $\theta = 0.2$, grouped by original study sample size.*

		BFbMA					EUBF					FEMABF					iBF				
N_{rep}	n_{rep}	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)
$n_{orig} = 20$																					
2	40	80.51	7.24	12.25	0.00	0.00	53.26	4.86	8.16	11.50	22.23	50.82	7.61	12.87	9.74	18.96	50.92	7.55	12.75	9.77	19.00
	100	49.52	18.64	31.83	0.00	0.00	46.93	10.85	17.95	7.96	16.30	40.48	15.44	25.84	5.89	12.34	40.55	15.41	25.78	5.90	12.36
	400	9.28	32.80	57.92	0.00	0.00	18.47	28.03	48.03	1.52	3.94	10.07	31.71	55.21	0.76	2.24	10.09	31.71	55.20	0.77	2.24
5	40	47.77	19.31	32.91	0.00	0.00	51.66	7.66	12.56	9.31	18.80	40.61	15.34	25.71	5.94	12.41	40.77	15.25	25.55	5.96	12.46
	100	15.86	30.65	53.49	0.00	0.00	37.22	18.70	31.02	3.98	9.08	20.05	27.06	46.26	1.92	4.71	20.12	27.04	46.20	1.92	4.72
	400	0.88	35.35	63.76	0.01	0.01	5.28	33.85	59.64	0.27	0.95	1.45	35.13	62.98	0.10	0.34	1.46	35.13	62.98	0.10	0.34
10	40	20.48	29.06	50.47	0.00	0.00	45.18	14.12	23.18	5.49	12.02	25.57	24.24	41.17	2.73	6.30	25.73	24.16	41.03	2.75	6.34
	100	3.88	34.54	61.58	0.00	0.00	19.52	27.93	47.52	1.34	3.68	6.76	33.11	58.16	0.49	1.48	6.79	33.10	58.14	0.49	1.48
	400	0.15	35.50	64.34	0.01	0.01	1.07	35.28	63.36	0.06	0.21	0.23	35.47	64.20	0.04	0.07	0.23	35.47	64.19	0.04	0.07
$n_{orig} = 50$																					
2	40	81.17	9.36	9.48	0.00	0.00	52.84	6.29	6.16	14.88	19.83	50.71	9.84	9.86	12.58	17.01	50.82	9.75	9.77	12.61	17.05
	100	50.83	24.09	25.08	0.00	0.00	47.04	13.95	13.54	10.34	15.13	40.99	19.90	19.85	7.66	11.61	41.05	19.86	19.80	7.67	11.62
	400	10.09	42.32	47.59	0.00	0.00	19.37	36.23	38.32	1.97	4.12	10.82	40.92	44.83	1.00	2.43	10.83	40.92	44.82	1.00	2.43
5	40	49.16	24.97	25.87	0.00	0.00	51.53	9.86	9.23	12.03	17.36	41.17	19.77	19.70	7.68	11.69	41.34	19.65	19.57	7.71	11.73
	100	17.04	39.56	43.41	0.00	0.00	38.15	24.14	23.59	5.14	8.98	21.06	34.92	36.72	2.48	4.81	21.12	34.89	36.67	2.49	4.82
	400	1.15	45.66	53.14	0.00	0.05	5.66	43.66	49.11	0.34	1.22	1.63	45.36	52.34	0.10	0.58	1.63	45.36	52.34	0.10	0.58
10	40	21.75	37.55	40.70	0.00	0.00	45.91	18.21	17.14	7.09	11.65	26.54	31.36	32.30	3.49	6.31	26.72	31.26	32.17	3.51	6.34
	100	4.40	44.59	51.01	0.00	0.00	20.61	36.15	37.57	1.75	3.92	7.31	42.73	47.66	0.62	1.68	7.35	42.72	47.63	0.62	1.69
	400	0.30	45.88	53.77	0.00	0.06	1.24	45.55	52.67	0.05	0.48	0.34	45.84	53.55	0.02	0.25	0.34	45.84	53.55	0.02	0.25
$n_{orig} = 200$																					
2	40	81.05	14.11	4.84	0.00	0.00	52.89	9.46	3.15	23.18	11.32	50.71	14.88	5.03	19.61	9.76	50.83	14.75	4.98	19.66	9.78
	100	50.52	36.58	12.89	0.00	0.00	47.14	21.05	6.74	16.18	8.90	41.02	30.11	9.99	11.98	6.90	41.09	30.04	9.96	12.00	6.91
	400	9.65	64.93	25.42	0.00	0.00	19.16	55.26	19.82	3.13	2.63	10.57	62.72	23.56	1.61	1.54	10.58	62.71	23.56	1.61	1.54
5	40	48.87	37.82	13.30	0.00	0.00	51.69	14.71	4.54	18.85	10.21	41.18	29.86	9.95	12.06	6.93	41.35	29.68	9.89	12.12	6.96
	100	16.60	60.54	22.85	0.00	0.00	38.17	36.40	11.74	8.12	5.58	20.84	53.27	18.92	3.93	3.05	20.90	53.21	18.90	3.94	3.06
	400	0.95	70.16	28.87	0.00	0.02	5.40	67.15	26.15	0.57	0.74	1.50	69.69	28.32	0.19	0.30	1.50	69.69	28.32	0.19	0.30
10	40	21.27	57.39	21.34	0.00	0.00	45.95	27.38	8.39	11.18	7.11	26.42	47.58	16.56	5.52	3.92	26.60	47.43	16.49	5.54	3.93
	100	4.07	68.51	27.43	0.00	0.00	20.39	55.11	19.23	2.73	2.54	6.99	65.66	25.26	0.99	1.09	7.02	65.64	25.25	1.00	1.10
	400	0.16	70.51	29.30	0.00	0.02	1.16	69.95	28.55	0.12	0.22	0.26	70.43	29.18	0.03	0.10	0.26	70.43	29.18	0.03	0.10

Table S17. *Replication success measures (AD, TS, FF, TF, FS) across MABF methods (one-sided test) by replication sample size (n_{rep}) and number of replications (N_{rep}) for true effect size $\theta = 0.5$, grouped by bias mechanism level.*

		BFbMA					EUBF					FEMABF					iBF				
N_{rep}	n_{rep}	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)
Bias level: low																					
2	40	32.14	41.77	26.09	0.00	0.00	30.51	41.12	24.50	1.50	2.36	19.58	47.74	29.80	1.08	1.80	19.74	47.64	29.73	1.08	1.80
	100	7.31	54.98	37.72	0.00	0.00	8.82	54.16	35.90	0.30	0.81	4.16	56.50	38.65	0.16	0.54	4.17	56.49	38.63	0.16	0.54
	400	0.31	58.16	41.53	0.00	0.00	0.52	58.11	41.21	0.00	0.16	0.23	58.18	41.48	0.00	0.12	0.23	58.18	41.48	0.00	0.12
5	40	4.10	56.73	39.18	0.00	0.00	11.57	52.85	34.21	0.38	0.99	4.21	56.46	38.60	0.17	0.56	4.25	56.44	38.58	0.17	0.57
	100	0.45	58.15	41.41	0.00	0.00	1.82	57.63	40.19	0.03	0.32	0.55	58.10	41.16	0.01	0.18	0.55	58.10	41.16	0.01	0.18
	400	0.06	58.20	41.73	0.00	0.01	0.11	58.20	41.61	0.00	0.08	0.05	58.20	41.70	0.00	0.05	0.05	58.20	41.70	0.00	0.05
10	40	0.62	58.10	41.28	0.00	0.00	3.15	57.07	39.27	0.07	0.44	0.91	57.97	40.87	0.02	0.24	0.92	57.97	40.86	0.02	0.24
	100	0.14	58.20	41.66	0.00	0.00	0.42	58.16	41.26	0.00	0.16	0.16	58.19	41.56	0.00	0.09	0.16	58.19	41.56	0.00	0.09
	400	0.04	58.20	41.76	0.00	0.01	0.04	58.20	41.71	0.00	0.05	0.02	58.20	41.74	0.00	0.04	0.02	58.20	41.74	0.00	0.04
Bias level: medium																					
2	40	30.11	60.36	9.54	0.00	0.00	28.68	59.22	9.05	2.32	0.73	17.91	68.98	10.90	1.67	0.54	18.05	68.86	10.88	1.67	0.54
	100	6.21	80.20	13.59	0.00	0.00	7.41	78.87	13.01	0.47	0.23	3.17	82.49	13.94	0.26	0.14	3.18	82.48	13.94	0.26	0.14
	400	0.11	85.00	14.89	0.00	0.00	0.27	84.88	14.82	0.01	0.01	0.07	85.02	14.90	0.00	0.00	0.07	85.02	14.90	0.00	0.00
5	40	3.07	82.82	14.11	0.00	0.00	9.82	76.89	12.42	0.59	0.27	3.22	82.46	13.92	0.27	0.14	3.26	82.42	13.91	0.27	0.14
	100	0.17	84.97	14.87	0.00	0.00	1.24	84.18	14.47	0.06	0.05	0.29	84.87	14.80	0.02	0.02	0.30	84.87	14.80	0.02	0.02
	400	0.00	85.07	14.93	0.00	0.00	0.01	85.06	14.93	0.00	0.00	0.00	85.07	14.93	0.00	0.00	0.00	85.07	14.93	0.00	0.00
10	40	0.27	84.90	14.83	0.00	0.00	2.30	83.35	14.14	0.12	0.08	0.54	84.68	14.71	0.04	0.03	0.55	84.67	14.71	0.04	0.03
	100	0.01	85.06	14.93	0.00	0.00	0.19	84.95	14.84	0.01	0.01	0.03	85.04	14.92	0.00	0.00	0.03	85.04	14.92	0.00	0.00
	400	0.00	85.07	14.93	0.00	0.00	0.00	85.07	14.93	0.00	0.00	0.00	85.07	14.93	0.00	0.00	0.00	85.07	14.93	0.00	0.00
Bias level: high																					
2	40	30.46	62.83	6.71	0.00	0.00	29.08	61.43	6.27	2.62	0.60	18.21	71.76	7.65	1.91	0.46	18.36	71.63	7.63	1.91	0.46
	100	6.46	83.79	9.75	0.00	0.00	7.75	82.21	9.24	0.60	0.20	3.45	86.10	9.97	0.35	0.12	3.46	86.10	9.97	0.35	0.12
	400	0.12	89.11	10.77	0.00	0.00	0.34	88.94	10.70	0.02	0.01	0.07	89.14	10.78	0.00	0.00	0.07	89.14	10.78	0.00	0.00
5	40	3.32	86.56	10.12	0.00	0.00	10.10	80.10	8.82	0.74	0.24	3.47	86.07	9.97	0.36	0.13	3.51	86.04	9.96	0.36	0.13
	100	0.21	89.05	10.74	0.00	0.00	1.46	88.00	10.40	0.10	0.04	0.37	88.90	10.68	0.03	0.02	0.37	88.90	10.68	0.03	0.02
	400	0.00	89.20	10.80	0.00	0.00	0.01	89.19	10.80	0.00	0.00	0.00	89.20	10.80	0.00	0.00	0.00	89.20	10.80	0.00	0.00
10	40	0.35	88.95	10.70	0.00	0.00	2.57	87.03	10.13	0.19	0.08	0.68	88.64	10.59	0.06	0.02	0.69	88.63	10.59	0.06	0.02
	100	0.01	89.19	10.80	0.00	0.00	0.23	89.03	10.72	0.01	0.00	0.04	89.17	10.79	0.00	0.00	0.04	89.17	10.79	0.00	0.00
	400	0.00	89.20	10.80	0.00	0.00	0.00	89.20	10.80	0.00	0.00	0.00	89.20	10.80	0.00	0.00	0.00	89.20	10.80	0.00	0.00

Table S18. *Replication success measures (AD, TS, FF, TF, FS) across MABF methods (one-sided test) by replication sample size (n_{rep}) and number of replications (N_{rep}) for true effect size $\theta = 0.5$, grouped by original study significance level.*

		BFbMA					EUBF					FEMABF					iBF				
N_{rep}	n_{rep}	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)
$\alpha = 0.01$																					
2	40	30.90	49.44	19.66	0.00	0.00	29.42	48.64	18.55	1.77	1.60	18.57	56.50	22.45	1.27	1.21	18.72	56.40	22.39	1.28	1.22
	100	6.66	65.22	28.12	0.00	0.00	7.99	64.26	26.87	0.36	0.52	3.59	67.05	28.83	0.19	0.33	3.61	67.05	28.82	0.19	0.33
	400	0.18	68.98	30.84	0.00	0.00	0.38	68.89	30.66	0.01	0.06	0.12	69.00	30.84	0.00	0.04	0.12	69.00	30.84	0.00	0.04
5	40	3.50	67.31	29.20	0.00	0.00	10.50	62.76	25.67	0.44	0.63	3.63	67.02	28.80	0.20	0.34	3.67	67.00	28.78	0.20	0.34
	100	0.28	68.95	30.77	0.00	0.00	1.51	68.35	29.94	0.04	0.16	0.40	68.89	30.62	0.01	0.08	0.41	68.88	30.62	0.01	0.08
	400	0.02	69.02	30.95	0.00	0.00	0.04	69.02	30.91	0.00	0.03	0.02	69.02	30.94	0.00	0.02	0.02	69.02	30.94	0.00	0.02
10	40	0.41	68.90	30.69	0.00	0.00	2.68	67.73	29.28	0.09	0.23	0.71	68.73	30.42	0.03	0.11	0.72	68.73	30.41	0.03	0.11
	100	0.05	69.02	30.93	0.00	0.00	0.28	68.95	30.70	0.00	0.06	0.08	69.01	30.88	0.00	0.03	0.08	69.01	30.88	0.00	0.03
	400	0.01	69.02	30.96	0.00	0.00	0.01	69.02	30.95	0.00	0.02	0.01	69.02	30.96	0.00	0.01	0.01	69.02	30.96	0.00	0.01
$\alpha = 0.05$																					
2	40	30.90	60.53	8.57	0.00	0.00	29.42	59.20	8.00	2.52	0.86	18.57	69.15	9.79	1.83	0.66	18.72	69.02	9.77	1.84	0.66
	100	6.66	80.76	12.58	0.00	0.00	7.99	79.23	11.90	0.56	0.31	3.59	83.01	12.87	0.32	0.20	3.61	83.00	12.87	0.32	0.20
	400	0.18	85.87	13.95	0.00	0.00	0.38	85.73	13.83	0.02	0.06	0.12	85.90	13.93	0.00	0.04	0.12	85.90	13.93	0.00	0.04
5	40	3.50	83.43	13.07	0.00	0.00	10.50	77.14	11.30	0.70	0.37	3.63	82.97	12.86	0.33	0.21	3.67	82.93	12.85	0.33	0.21
	100	0.28	85.82	13.90	0.00	0.00	1.51	84.86	13.43	0.09	0.12	0.40	85.70	13.81	0.03	0.06	0.41	85.70	13.81	0.03	0.06
	400	0.02	85.96	14.02	0.00	0.00	0.04	85.95	13.98	0.00	0.03	0.02	85.96	14.01	0.00	0.02	0.02	85.96	14.01	0.00	0.02
10	40	0.41	85.74	13.85	0.00	0.00	2.68	83.91	13.09	0.16	0.16	0.71	85.46	13.70	0.06	0.08	0.72	85.45	13.69	0.06	0.08
	100	0.05	85.95	14.00	0.00	0.00	0.28	85.80	13.85	0.01	0.05	0.08	85.93	13.96	0.00	0.03	0.08	85.93	13.96	0.00	0.03
	400	0.01	85.96	14.03	0.00	0.00	0.01	85.96	14.01	0.00	0.02	0.01	85.96	14.02	0.00	0.01	0.01	85.96	14.02	0.00	0.01

Table S19. *Replication success measures (AD, TS, FF, TF, FS) across MABF methods (one-sided test) by replication sample size (n_{rep}) and number of replications (N_{rep}) for true effect size $\theta = 0.5$, grouped by original study sample size.*

		BFbMA					EUBF					FEMABF					iBF				
N_{rep}	n_{rep}	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)	AD (%)	TS (%)	FF (%)	TF (%)	FS (%)
$n_{orig} = 20$																					
2	40	30.25	42.92	26.84	0.00	0.00	28.72	42.62	25.48	1.26	1.92	17.99	49.03	30.66	0.89	1.43	18.13	48.95	30.59	0.90	1.43
	100	6.37	55.66	37.97	0.00	0.00	7.61	55.12	36.49	0.24	0.55	3.37	57.19	38.98	0.13	0.34	3.39	57.18	38.96	0.13	0.34
	400	0.14	58.50	41.36	0.00	0.00	0.34	58.45	41.17	0.00	0.04	0.09	58.52	41.37	0.00	0.02	0.09	58.52	41.37	0.00	0.02
5	40	3.26	57.35	39.39	0.00	0.00	10.06	54.03	34.95	0.29	0.67	3.43	57.16	38.94	0.13	0.34	3.46	57.15	38.92	0.13	0.34
	100	0.22	58.49	41.29	0.00	0.00	1.43	58.09	40.33	0.03	0.13	0.37	58.44	41.13	0.01	0.06	0.37	58.44	41.12	0.01	0.06
	400	0.00	58.53	41.46	0.00	0.00	0.03	58.53	41.43	0.00	0.01	0.01	58.53	41.46	0.00	0.00	0.01	58.53	41.46	0.00	0.00
10	40	0.35	58.46	41.20	0.00	0.00	2.52	57.66	39.55	0.06	0.21	0.65	58.34	40.90	0.02	0.09	0.66	58.34	40.89	0.02	0.09
	100	0.02	58.53	41.44	0.00	0.00	0.24	58.49	41.24	0.00	0.03	0.06	58.53	41.40	0.00	0.01	0.06	58.53	41.40	0.00	0.01
	400	0.00	58.53	41.47	0.00	0.00	0.00	58.53	41.46	0.00	0.00	0.00	58.53	41.47	0.00	0.00	0.00	58.53	41.47	0.00	0.00
$n_{orig} = 50$																					
2	40	30.61	55.01	14.38	0.00	0.00	29.19	54.10	13.39	1.98	1.34	18.29	62.84	16.43	1.43	1.02	18.43	62.73	16.39	1.43	1.02
	100	6.57	72.38	21.05	0.00	0.00	7.77	71.38	19.99	0.42	0.43	3.44	74.43	21.61	0.24	0.29	3.45	74.42	21.60	0.24	0.29
	400	0.22	76.57	23.21	0.00	0.00	0.34	76.45	23.08	0.01	0.11	0.13	76.58	23.20	0.00	0.09	0.13	76.58	23.20	0.00	0.09
5	40	3.40	74.70	21.91	0.00	0.00	10.22	69.72	19.00	0.52	0.53	3.48	74.39	21.58	0.25	0.30	3.52	74.36	21.57	0.25	0.30
	100	0.30	76.53	23.16	0.00	0.00	1.38	75.83	22.55	0.07	0.17	0.36	76.44	23.07	0.02	0.11	0.37	76.44	23.07	0.02	0.11
	400	0.06	76.63	23.30	0.00	0.01	0.06	76.62	23.24	0.00	0.07	0.04	76.63	23.28	0.00	0.05	0.04	76.63	23.28	0.00	0.05
10	40	0.42	76.47	23.11	0.00	0.00	2.51	75.14	22.01	0.12	0.22	0.65	76.26	22.92	0.04	0.13	0.65	76.26	22.92	0.04	0.13
	100	0.11	76.63	23.27	0.00	0.00	0.25	76.51	23.12	0.01	0.11	0.09	76.61	23.23	0.00	0.07	0.09	76.61	23.23	0.00	0.07
	400	0.04	76.63	23.32	0.00	0.01	0.04	76.63	23.28	0.00	0.05	0.02	76.63	23.31	0.00	0.04	0.02	76.63	23.31	0.00	0.04
$n_{orig} = 200$																					
2	40	31.85	67.02	1.13	0.00	0.00	30.36	65.05	0.95	3.20	0.44	19.42	76.62	1.27	2.33	0.36	19.58	76.45	1.26	2.34	0.36
	100	7.04	90.92	2.03	0.00	0.00	8.60	88.75	1.68	0.72	0.25	3.97	93.47	1.98	0.40	0.17	3.98	93.46	1.97	0.40	0.18
	400	0.18	97.19	2.62	0.00	0.00	0.45	97.02	2.48	0.02	0.04	0.15	97.24	2.59	0.00	0.02	0.15	97.24	2.59	0.00	0.02
5	40	3.82	94.06	2.11	0.00	0.00	11.21	86.10	1.49	0.90	0.30	3.99	93.44	1.98	0.42	0.18	4.03	93.39	1.97	0.42	0.18
	100	0.30	97.14	2.56	0.00	0.00	1.71	95.90	2.17	0.10	0.12	0.48	96.99	2.45	0.03	0.05	0.48	96.99	2.44	0.03	0.05
	400	0.00	97.30	2.70	0.00	0.00	0.04	97.29	2.66	0.00	0.00	0.00	97.30	2.70	0.00	0.00	0.00	97.30	2.70	0.00	0.00
10	40	0.47	97.03	2.50	0.00	0.00	3.00	94.65	1.99	0.20	0.17	0.83	96.68	2.35	0.06	0.08	0.84	96.67	2.34	0.06	0.08
	100	0.03	97.29	2.68	0.00	0.00	0.35	97.14	2.47	0.01	0.03	0.08	97.28	2.64	0.00	0.01	0.08	97.28	2.64	0.00	0.01
	400	0.00	97.30	2.70	0.00	0.00	0.00	97.30	2.70	0.00	0.00	0.00	97.30	2.70	0.00	0.00	0.00	97.30	2.70	0.00	0.00