

Supplementary Tables

1. Type I Error ($\alpha = 0.01$)

Table 1. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with I covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.01

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.0086	0.0092	0.0081
	8	0.0100	0.0110	0.0107
CS	4	0.0086	0.0105	0.0084
	8	0.0095	0.0101	0.0097
CSH	4	0.0066	0.0105	0.0083
	8	0.0060	0.0100	0.0110
AR	4	0.0089	0.0097	0.0082
	8	0.0096	0.0106	0.0107
ARH	4	0.0070	0.0089	0.0082
	8	0.0061	0.0106	0.0114
TOEP	4	0.0146	0.0111	0.0099
	8	0.0294 ^a	0.0135	0.0111
TOEPH	4	0.0070	0.0088	0.0091
	8	0.0047 ^b	0.0103	0.0115
TOEP (2)	4	0.0109	0.0101	0.0080
	8	0.0110	0.0106	0.0106
TOEPH (2)	4	0.0090	0.0090	0.0079
	8	0.0073 ^a	0.0101	0.0117
TOEP (3)	4	0.0118	0.0107	0.0090
	8	0.0108	0.0109	0.0118
TOEPH (3)	4	0.0098	0.0086	0.008
	8	0.0070 ^a	0.0093	0.0114
UN	4	0.0092	0.0113	0.0097
	8	nc	0.0099	0.0109

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 2. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with VC covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.01

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.0176	0.0176	0.0167
	8	0.0173	0.0159	0.0182
CS	4	0.0164	0.0163	0.0178
	8	0.0164	0.0157	0.0186
CSH	4	0.0085	0.0118	0.0106
	8	0.0077	0.0107	0.0112
AR	4	0.0166	0.0152	0.0176
	8	0.0168	0.0164	0.0177
ARH	4	0.0079	0.0111	0.0107
	8	0.0073	0.0097	0.0109
TOEP	4	0.0181	0.0158	0.0178
	8	0.0305	0.0153	0.0176
TOEPH	4	0.0078	0.0103	0.0107
	8	0.0060	0.0094	0.0107
TOEP (2)	4	0.0188	0.0161	0.0173
	8	0.0183	0.0165	0.0175
TOEPH (2)	4	0.0100	0.0118	0.0106
	8	0.0082	0.0095	0.0111
TOEP (3)	4	0.0168	0.0166	0.0184
	8	0.0198	0.0165	0.0183
TOEPH (3)	4	0.0085	0.0116	0.0110
	8	0.0092	0.0089	0.0105
UN	4	0.0100	0.0095	0.0128
	8	nc	0.0093	0.0090

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 3. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with CSH covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.01

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.0009	0.0000	0.0000
	8	0.0005	0.0000	0.0001
CS	4	0.0158	0.0160	0.0149
	8	0.0226	0.0213	0.0236
CSH	4	0.0070	0.0084	0.0073
	8	0.0061	0.0054	0.0077
AR	4	0.0104	0.0116	0.0124
	8	0.0123	0.0172	0.0193
ARH	4	0.0090	0.0124	0.0114
	8	0.0067	0.0142	0.0123
TOEP	4	0.0150	0.0126	0.0117
	8	0.0306	0.0138	0.0166
TOEPH	4	0.0077	0.0089	0.0072
	8	0.0083	0.0068	0.0085
TOEP (2)	4	0.0103	0.0061	0.0046
	8	0.0067	0.0033	0.0026
TOEPH (2)	4	0.0079	0.0061	0.0035
	8	0.0117	0.0031	0.0015
TOEP (3)	4	0.0093	0.0049	0.0038
	8	0.0093	0.0047	0.0043
TOEPH (3)	4	0.0074	0.0067	0.0037
	8	0.0093	0.0040	0.0032
UN	4	0.0105	0.0108	0.0073
	8	nc	0.0092	0.0088

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 4. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with ARH covariance structure for the covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.01

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.0024	0.0008	0.0012
	8	0.0089	0.0076	0.0046
CS	4	0.0260	0.0260	0.0256
	8	0.0458	0.0475	0.0448
CSH	4	0.0101	0.0108	0.0116
	8	0.0153	0.0208	0.0201
AR	4	0.0100	0.0119	0.0139
	8	0.0101	0.0134	0.0133
ARH	4	0.0052	0.0091	0.0084
	8	0.0062	0.0094	0.0079
TOEP	4	0.0168	0.0117	0.0131
	8	0.0284	0.0145	0.0127
TOEPH	4	0.0087	0.0085	0.0091
	8	0.0096	0.0118	0.0095
TOEP (2)	4	0.0118	0.0079	0.0062
	8	0.0139	0.0075	0.0060
TOEPH (2)	4	0.0107	0.0077	0.0052
	8	0.0232	0.0082	0.0060
TOEP (3)	4	0.0118	0.0073	0.0063
	8	0.0146	0.0088	0.0083
TOEPH (3)	4	0.0100	0.0078	0.0073
	8	0.0204	0.0075	0.0065
UN	4	0.0118	0.0093	0.0097
	8	nc	0.0108	0.0101

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 5. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with TOEP covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.01

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.0006	0.0004	0.0003
	8	0.0034	0.0011	0.0014
CS	4	0.0233	0.0231	0.0247
	8	0.0420	0.0415	0.0434
CSH	4	0.0104	0.0163	0.0198
	8	0.013	0.0271	0.0330
AR	4	0.0058	0.0095	0.0094
	8	0.0058	0.0073	0.0102
ARH	4	0.0050	0.0100	0.0103
	8	0.0041	0.0078	0.0107
TOEP	4	0.0167	0.0118	0.0115
	8	0.0286	0.0109	0.0124
TOEPH	4	0.0077	0.0094	0.0093
	8	0.0050	0.0094	0.0097
TOEP (2)	4	0.0099	0.0061	0.0039
	8	0.0068	0.0036	0.0033
TOEPH (2)	4	0.0098	0.0067	0.0035
	8	0.0190	0.005	0.0039
TOEP (3)	4	0.0093	0.0063	0.0044
	8	0.0096	0.0048	0.0046
TOEPH (3)	4	0.0101	0.0079	0.0064
	8	0.0153	0.0058	0.0051
UN	4	0.0115	0.0099	0.0111
	8	nc	0.0080	0.0097

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 6. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with TOEP (2) covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.01

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.0064	0.0065	0.0043
	8	0.0118	0.0144	0.0125
CS	4	0.0213	0.0212	0.0219
	8	0.0265	0.0295	0.0258
CSH	4	0.0111	0.0168	0.0189
	8	0.0122	0.0220	0.0231
AR	4	0.0090	0.0124	0.0123
	8	0.0115	0.0162	0.0156
ARH	4	0.0067	0.0104	0.0122
	8	0.0076	0.0136	0.0123
TOEP	4	0.0164	0.0128	0.0102
	8	0.0369	0.0129	0.0100
TOEPH	4	0.0085	0.0099	0.0094
	8	0.0066	0.0126	0.0098
TOEP (2)	4	0.0132	0.0120	0.0092
	8	0.0175	0.0172	0.0139
TOEPH (2)	4	0.0170	0.0109	0.0098
	8	0.0240	0.0165	0.0129
TOEP (3)	4	0.0146	0.0126	0.011
	8	0.0167	0.0168	0.0147
TOEPH (3)	4	0.0116	0.0107	0.0102
	8	0.0179	0.0128	0.0123
UN	4	0.0118	0.0097	0.0101
	8	nc	0.0097	0.0107

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 7. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with TOEPH (2) covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.01

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.0201	0.0083	0.0064
	8	0.0217	0.0188	0.0183
CS	4	0.0298	0.0250	0.0233
	8	0.0337	0.0341	0.0333
CSH	4	0.0109	0.0183	0.0164
	8	0.0147	0.0211	0.0227
AR	4	0.0146	0.0154	0.0156
	8	0.0201	0.0228	0.0222
ARH	4	0.0070	0.0129	0.0135
	8	0.0082	0.014	0.0161
TOEP	4	0.0234	0.0133	0.0111
	8	0.0342	0.0186	0.0161
TOEPH	4	0.0055	0.0106	0.0104
	8	0.0076	0.0142	0.0132
TOEP (2)	4	0.0213	0.0118	0.0106
	8	0.0249	0.0212	0.0184
TOEPH (2)	4	0.0205	0.0111	0.0102
	8	0.0242	0.0163	0.0166
TOEP (3)	4	0.0199	0.0148	0.0123
	8	0.0245	0.0253	0.0209
TOEPH (3)	4	0.0103	0.0111	0.0116
	8	0.0165	0.0149	0.0146
UN	4	0.0100	0.0098	0.0097
	8	nc	0.0103	0.0112

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 8. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with TOEP (3) covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.01

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.0025	0.0016	0.0009
	8	0.0146	0.0134	0.0011
CS	4	0.0342	0.0360	0.0298
	8	0.0438	0.0406	0.0364
CSH	4	0.0167	0.0259	0.0276
	8	0.0187	0.0327	0.0282
AR	4	0.0132	0.0176	0.0204
	8	0.0144	0.0161	0.0220
ARH	4	0.0106	0.0184	0.0209
	8	0.0089	0.0168	0.0227
TOEP	4	0.0105	0.0108	0.0055
	8	0.0319	0.0117	0.0097
TOEPH	4	0.0056	0.0096	0.0078
	8	0.0074	0.0133	0.0090
TOEP (2)	4	0.0142	0.0110	0.0990
	8	0.0199	0.0153	0.0120
TOEPH (2)	4	0.0078	0.0088	0.0054
	8	0.0236	0.0162	0.0092
TOEP (3)	4	0.0100	0.0099	0.0075
	8	0.0134	0.0106	0.0081
TOEPH (3)	4	0.0121	0.0121	0.0088
	8	0.0223	0.0127	0.0096
UN	4	0.0097	0.0111	0.0091
	8	nc	0.0114	0.0092

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0% > c ≥ 70.0%; 70.0% > d ≥ 60.0%; nc < 60%.

Table 9. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with TOEPH (3) covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.01

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.0049	0.0034	0.0021
	8	0.0181	0.0155	0.0168
CS	4	0.0350	0.0387	0.0322
	8	0.0469	0.048	0.0494
CSH	4	0.0124	0.0183	0.0167
	8	0.0181	0.0278	0.0325
AR	4	0.0144	0.0219	0.0200
	8	0.0206	0.0207	0.0224
ARH	4	0.0104	0.0163	0.0146
	8	0.0092	0.0166	0.0164
TOEP	4	0.0117	0.0116	0.0109
	8	0.0249	0.0138	0.0147
TOEPH	4	0.0052	0.0090	0.0085
	8	0.0093	0.0116	0.0118
TOEP (2)	4	0.0152	0.0145	0.0109
	8	0.0250	0.0199	0.0176
TOEPH (2)	4	0.0091	0.0094	0.0090
	8	0.0262	0.0178	0.0141
TOEP (3)	4	0.0121	0.0107	0.0087
	8	0.0171	0.0133	0.0133
TOEPH (3)	4	0.0133	0.0098	0.0098
	8	0.0199	0.013	0.0117
UN	4	0.0092	0.0088	0.0072
	8	nc	0.0109	0.0081

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 10. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with BAND (3) covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.01

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.0033	0.0024	0.0018
	8	0.0126	0.0127	0.0104
CS	4	0.0254	0.0269	0.0266
	8	0.0380	0.0372	0.0345
CSH	4	0.0132	0.0203	0.0218
	8	0.0177	0.0304	0.0311
AR	4	0.0202	0.0244	0.0256
	8	0.0207	0.0274	0.0253
ARH	4	0.0141	0.0217	0.0246
	8	0.0140	0.0264	0.0246
TOEP	4	0.0116	0.0109	0.0111
	8	0.0291	0.0132	0.0116
TOEPH	4	0.0059	0.0092	0.0106
	8	0.0063	0.0129	0.0118
TOEP (2)	4	0.0161	0.0135	0.0114
	8	0.0178	0.0178	0.0155
TOEPH (2)	4	0.0103	0.0114	0.0102
	8	0.0168	0.0173	0.0137
TOEP (3)	4	0.0113	0.0108	0.0102
	8	0.0111	0.0105	0.0098
TOEPH (3)	4	0.0137	0.0118	0.0113
	8	0.0335	0.0137	0.0125
UN	4	0.0108	0.0109	0.0107
	8	nc	0.0083	0.0113

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0% > c ≥ 70.0%; 70.0% > d ≥ 60.0%; nc < 60%.

Table 11. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with BANDH (3) covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.01

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.0041	0.003	0.0027
	8	0.0168	0.0162	0.0143
CS	4	0.0258	0.0269	0.0296
	8	0.0444	0.0457	0.0407
CSH	4	0.0113	0.0139	0.0158
	8	0.0158	0.0257	0.0273
AR	4	0.0195	0.0225	0.0253
	8	0.0321	0.0348	0.0323
ARH	4	0.0132	0.0193	0.0224
	8	0.0153	0.0253	0.0261
TOEP	4	0.0141	0.0122	0.0161
	8	0.0270	0.0147	0.0143
TOEPH	4	0.0078	0.0082	0.0106
	8	0.0089	0.0122	0.0130
TOEP (2)	4	0.0175	0.0123	0.0133
	8	0.0277	0.0230	0.0190
TOEPH (2)	4	0.0128	0.0099	0.0098
	8	0.0198	0.0170	0.0157
TOEP (3)	4	0.0135	0.0115	0.0146
	8	0.0154	0.0150	0.0136
TOEPH (3)	4	0.0162	0.0118	0.0113
	8	0.0338	0.0135	0.0129
UN	4	0.0112	0.0088	0.0117
	8	nc	0.0096	0.0103

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

2. Type I Error ($\alpha = 0.05$)

Table 12. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with I covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.0477	0.0513	0.0467
	8	0.0497	0.0518	0.0504
CS	4	0.0487	0.0503	0.0457
	8	0.0496	0.0519	0.0511
CSH	4	0.0409 ^a	0.0487	0.0463
	8	0.0435	0.0472	0.0502
AR	4	0.0449	0.0533	0.4680
	8	0.0490	0.0516	0.0511
ARH	4	0.0421	0.0501	0.0464
	8	0.0420	0.0479	0.0511
TOEP	4	0.0538 ^a	0.0554	0.0496
	8	0.0816 ^b	0.0549	0.0551
TOEPH	4	0.0395	0.0497	0.0460
	8	0.0179 ^c	0.0466	0.0512
TOEP (2)	4	0.0473	0.0531	0.0467
	8	0.0502	0.0512	0.0512
TOEPH (2)	4	0.0421	0.0491	0.0468
	8	0.0416 ^b	0.0479	0.0495
TOEP (3)	4	0.0522	0.0551	0.0489
	8	0.0517	0.0535	0.0537
TOEPH (3)	4	0.0415	0.0507	0.0475
	8	0.0413 ^b	0.0472	0.0491
UN	4	0.0485	0.0516	0.0473
	8	nc	0.0488	0.0524

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 13. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with VC covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.0658	0.0578	0.0610
	8	0.0676	0.0609	0.0642
CS	4	0.0617	0.0556	0.0598
	8	0.0665	0.0620	0.0645
CSH	4	0.0457 ^a	0.0501	0.0510
	8	0.0436	0.0467	0.0515
AR	4	0.0595	0.0583	0.0602
	8	0.0686	0.0621	0.0662
ARH	4	0.0471	0.0504	0.0509
	8	0.0426	0.0474	0.0508
TOEP	4	0.0641	0.0587	0.0621
	8	0.0828	0.0615	0.0647
TOEPH	4	0.0416	0.0504	0.0522
	8	0.0219	0.0457	0.0520
TOEP (2)	4	0.0639	0.0580	0.0607
	8	0.0699	0.0628	0.0666
TOEPH (2)	4	0.0477	0.0491	0.0510
	8	0.0430	0.0471	0.0513
TOEP (3)	4	0.0654	0.0593	0.0639
	8	0.0734	0.0651	0.0685
TOEPH (3)	4	0.0461	0.0490	0.0509
	8	0.0408	0.0458	0.0513
UN	4	0.0532	0.0504	0.0519
	8	nc	0.0502	0.0496

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 14. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with CS covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.0004	0.0000	0.0000
	8	0.0002	0.0002	0.0000
CS	4	0.0496	0.0499	0.0533
	8	0.0514	0.0490	0.0544
CSH	4	0.0299	0.0403	0.0467
	8	0.0190	0.0393	0.0464
AR	4	0.0362	0.0454	0.0511
	8	0.0357	0.0422	0.0518
ARH	4	0.0384	0.0502	0.0513
	8	0.0349	0.0458	0.0525
TOEP	4	0.0563	0.0476	0.0534
	8	0.0898	0.0526	0.0537
TOEPH	4	0.0360	0.0411	0.0482
	8	0.0271 ^c	0.0526	0.0460
TOEP (2)	4	0.0265	0.0174	0.0186
	8	0.0146	0.0077	0.0074
TOEPH (2)	4	0.0274	0.0198	0.0196
	8	0.0283 ^b	0.0106	0.0089
TOEP (3)	4	0.0325	0.0192	0.0194
	8	0.0275	0.0141	0.0132
TOEPH (3)	4	0.0287	0.0263	0.0276
	8	0.0311 ^b	0.0163	0.0162
UN	4	0.0508	0.0503	0.0522
	8	nc	0.0518	0.0508

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 15. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with CSH covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.0039	0.0012	0.0002
	8	0.0030	0.0004	0.0002
CS	4	0.0598	0.0601	0.0575
	8	0.0697	0.0722	0.0735
CSH	4	0.0387	0.0447	0.0427
	8	0.0285	0.0400	0.0459
AR	4	0.0382	0.0475	0.0457
	8	0.0449	0.0533	0.0549
ARH	4	0.0424	0.0513	0.0486
	8	0.0340	0.0495	0.0493
TOEP	4	0.0578	0.0544	0.0515
	8	0.0792	0.0619	0.061
TOEPH	4	0.0394 ^a	0.0445	0.0443
	8	0.0287	0.0422	0.0489
TOEP (2)	4	0.0318	0.0231	0.0201
	8	0.0191	0.0135	0.0114
TOEPH (2)	4	0.0325 ^a	0.0243	0.0189
	8	0.0307	0.0122	0.0096
TOEP (3)	4	0.0346	0.0234	0.0200
	8	0.0292	0.0228	0.0179
TOEPH (3)	4	0.0374 ^a	0.0312	0.0281
	8	0.0327	0.0194	0.0156
UN	4	0.0524	0.0510	0.0467
	8	nc	0.0495	0.0494

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0% > c ≥ 70.0%; 70.0% > d ≥ 60.0%; nc < 60%.

Table 16. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with AR covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.0038	0.0032	0.0019
	8	0.0163	0.0121	0.0111
CS	4	0.0641	0.0644	0.0645
	8	0.0971	0.0976	0.093
CSH	4	0.0395	0.0534	0.0543
	8	0.0562	0.0803	0.0811
AR	4	0.0323	0.0398	0.0433
	8	0.0361	0.0414	0.0439
ARH	4	0.0316	0.0422	0.0460
	8	0.0331	0.0455	0.0472
TOEP	4	0.0557	0.0476	0.0493
	8	0.0822	0.0522	0.0478
TOEPH	4	0.0364	0.0446	0.0464
	8	0.0233 ^c	0.0492	0.0467
TOEP (2)	4	0.0334	0.0224	0.0198
	8	0.0331	0.0221	0.0196
TOEPH (2)	4	0.0413	0.0262	0.0211
	8	0.0511 ^b	0.0283	0.0212
TOEP (3)	4	0.0358	0.0282	0.0277
	8	0.0396	0.031	0.0268
TOEPH (3)	4	0.0390	0.0353	0.0327
	8	0.0512 ^b	0.0351	0.0305
UN	4	0.0487	0.0496	0.0478
	8	nc	0.0501	0.0494

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 17. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with ARH covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.0108	0.0054	0.0065
	8	0.0247	0.0197	0.0164
CS	4	0.0743	0.0733	0.0759
	8	0.1022	0.103	0.0983
CSH	4	0.0389	0.0423	0.0465
	8	0.0529	0.0602	0.0599
AR	4	0.0413	0.0486	0.0530
	8	0.0453	0.0576	0.0562
ARH	4	0.0384	0.0445	0.0480
	8	0.0335	0.0484	0.0474
TOEP	4	0.0562	0.0528	0.0551
	8	0.0746	0.0597	0.0577
TOEPH	4	0.0372 ^a	0.0465	0.0500
	8	0.0287	0.0493	0.0467
TOEP (2)	4	0.0381	0.0308	0.0296
	8	0.0410	0.0318	0.0274
TOEPH (2)	4	0.0419	0.0324	0.0294
	8	0.0583	0.0338	0.0265
TOEP (3)	4	0.0418	0.0353	0.0350
	8	0.0487	0.0399	0.0364
TOEPH (3)	4	0.0444 ^a	0.0373	0.0379
	8	0.0560	0.0345	0.0322
UN	4	0.0490	0.0503	0.0525
	8	nc	0.0518	0.0457

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 18. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with TOEP covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.0050	0.0027	0.0019
	8	0.0091	0.0049	0.0048
CS	4	0.0781	0.0711	0.0723
	8	0.0975	0.0931	0.0918
CSH	4	0.0434	0.0569	0.0627
	8	0.0467	0.074	0.0749
AR	4	0.0353	0.0400	0.0451
	8	0.0296	0.0425	0.0475
ARH	4	0.0339	0.0447	0.0484
	8	0.0274	0.0423	0.0511
TOEP	4	0.0568 ^a	0.0497	0.0509
	8	0.0802	0.0557	0.0524
TOEPH	4	0.0363	0.0427	0.0470
	8	0.0219 ^c	0.0470	0.0463
TOEP (2)	4	0.0340	0.0238	0.0206
	8	0.0234	0.0147	0.0137
TOEPH (2)	4	0.0377	0.0271	0.0224
	8	0.0430 ^b	0.0193	0.0141
TOEP (3)	4	0.0353	0.0260	0.0258
	8	0.0316	0.0223	0.0227
TOEPH (3)	4	0.0427 ^a	0.0365	0.0342
	8	0.0449 ^b	0.0248	0.0232
UN	4	0.0496	0.0510	0.0496
	8	nc	0.0507	0.0498

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 19. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with TOEPH covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.0106	0.0066	0.0053
	8	0.0176	0.0128	0.0093
CS	4	0.0832	0.0823	0.0802
	8	0.1084	0.1072	0.0999
CSH	4	0.0429	0.0458	0.0463
	8	0.0428	0.0483	0.0461
AR	4	0.0436	0.0563	0.0604
	8	0.0463	0.0555	0.0572
ARH	4	0.0356	0.0458	0.0479
	8	0.0348	0.0482	0.0486
TOEP	4	0.0605	0.0566	0.0593
	8	0.0796	0.0633	0.0571
TOEPH	4	0.0398 ^a	0.0445	0.0488
	8	0.0283	0.0508	0.0469
TOEP (2)	4	0.0404	0.0316	0.0312
	8	0.0351	0.0244	0.0208
TOEPH (2)	4	0.0476 ^a	0.0295	0.0294
	8	0.0510	0.0258	0.0204
TOEP (3)	4	0.0398	0.0385	0.0372
	8	0.0425	0.0349	0.0300
TOEPH (3)	4	0.0490 ^a	0.0408	0.0415
	8	0.0470	0.0301	0.0255
UN	4	0.0503	0.0501	0.0513
	8	nc	0.0541	0.0478

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 20. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with TOEP (2) covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.0303	0.0270	0.0243
	8	0.0456	0.0485	0.0428
CS	4	0.0701	0.0720	0.0658
	8	0.0815	0.0832	0.0765
CSH	4	0.0532	0.0635	0.0645
	8	0.0545	0.0752	0.0742
AR	4	0.0481	0.0560	0.0584
	8	0.0579	0.0650	0.0600
ARH	4	0.0443	0.0569	0.0600
	8	0.0407	0.0628	0.0583
TOEP	4	0.0623 ^a	0.0564	0.0506
	8	0.0892	0.0546	0.0486
TOEPH	4	0.0436	0.0488	0.0484
	8	0.02116	0.0529	0.0499
TOEP (2)	4	0.0529	0.0485	0.0456
	8	0.0638	0.0577	0.0516
TOEPH (2)	4	0.0609	0.0510	0.0454
	8	0.0689	0.0613	0.0558
TOEP (3)	4	0.0586	0.0571	0.0540
	8	0.0687	0.0645	0.0589
TOEPH (3)	4	0.0488	0.0525	0.0527
	8	0.0525	0.0564	0.0545
UN	4	0.0506	0.0508	0.0487
	8	nc	0.0475	0.0520

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 21. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with TOEPH (2) covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.0344	0.0308	0.0261
	8	0.0584	0.0531	0.0516
CS	4	0.0762	0.0723	0.0693
	8	0.0921	0.0843	0.0866
CSH	4	0.0524 ^a	0.0609	0.0594
	8	0.0546	0.0671	0.0676
AR	4	0.0532	0.0594	0.0592
	8	0.0695	0.0721	0.0733
ARH	4	0.0431	0.0582	0.0581
	8	0.0443	0.0584	0.0594
TOEP	4	0.0660 ^a	0.0548	0.0532
	8	0.0901	0.0639	0.0573
TOEPH	4	0.0419	0.0485	0.0462
	8	0.0241	0.0537	0.0528
TOEP (2)	4	0.0547	0.0499	0.0485
	8	0.0744	0.0677	0.0632
TOEPH (2)	4	0.0588	0.0506	0.0472
	8	0.0723	0.061	0.0561
TOEP (3)	4	0.0627	0.0563	0.0564
	8	0.0776	0.0776	0.0706
TOEPH (3)	4	0.0472	0.0520	0.0509
	8	0.052	0.0609	0.0601
UN	4	0.0533	0.0483	0.0506
	8	0.2815	0.0482	0.0538

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 22. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with TOEP (3) covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.0135	0.0095	0.0085
	8	0.0427	0.0368	0.0409
CS	4	0.0913	0.0865	0.0858
	8	0.1060	0.0942	0.1048
CSH	4	0.0562	0.0697	0.0693
	8	0.0684	0.0816	0.0946
AR	4	0.0525	0.0642	0.0696
	8	0.0559	0.0612	0.0674
ARH	4	0.0481	0.0650	0.0717
	8	0.0453	0.0614	0.0647
TOEP	4	0.0501 ^a	0.0479	0.0531
	8	0.0795	0.0501	0.0531
TOEPH	4	0.0310 ^a	0.0433	0.0494
	8	0.0288	0.0500	0.0525
TOEP (2)	4	0.0485	0.0390	0.0422
	8	0.0581	0.0511	0.0555
TOEPH (2)	4	0.0380	0.0315	0.0327
	8	0.0670	0.052	0.0523
TOEP (3)	4	0.0451	0.0434	0.0460
	8	0.0534	0.0493	0.0516
TOEPH (3)	4	0.0517	0.0496	0.0519
	8	0.0609	0.052	0.0511
UN	4	0.0484	0.0515	0.0517
	8	nc	0.0540	0.0497

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 23. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with TOEPH (3) covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.018	0.0137	0.0116
	8	0.0474	0.0443	0.0466
CS	4	0.0901	0.0929	0.0821
	8	0.1057	0.1064	0.1101
CSH	4	0.0450	0.0571	0.0532
	8	0.0590	0.0778	0.0808
AR	4	0.0538	0.0724	0.0667
	8	0.0633	0.0722	0.0734
ARH	4	0.0423	0.0645	0.0584
	8	0.0457	0.0633	0.0622
TOEP	4	0.0510 ^a	0.0552	0.0501
	8	0.0774	0.0543	0.0566
TOEPH	4	0.0339 ^a	0.0462	0.0471
	8	0.0276	0.0530	0.0500
TOEP (2)	4	0.0499	0.0502	0.0379
	8	0.0676	0.0614	0.0548
TOEPH (2)	4	0.0438 ^a	0.0405	0.0333
	8	0.0685	0.0597	0.0542
TOEP (3)	4	0.048	0.0498	0.0435
	8	0.0627	0.0568	0.0535
TOEPH (3)	4	0.0560 ^a	0.0521	0.0498
	8	0.06123	0.0579	0.0525
UN	4	0.0474	0.0480	0.0452
	8	nc	0.0507	0.0466

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 24. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with BAND (3) covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.014	0.0116	0.0103
	8	0.0406	0.0365	0.0344
CS	4	0.0769	0.0777	0.0757
	8	0.0922	0.0912	0.0916
CSH	4	0.0500	0.0639	0.0667
	8	0.0608	0.0818	0.0823
AR	4	0.0638	0.0706	0.0738
	8	0.0743	0.0772	0.0753
ARH	4	0.0571	0.0685	0.074
	8	0.0563	0.0765	0.0739
TOEP	4	0.0535 ^a	0.0476	0.0498
	8	0.0772	0.0578	0.0533
TOEPH	4	0.0337	0.0452	0.0459
	8	0.0253	0.054	0.0531
TOEP (2)	4	0.0496	0.0423	0.042
	8	0.0639	0.0563	0.0484
TOEPH (2)	4	0.0432	0.0376	0.0403
	8	0.0540	0.056	0.0479
TOEP (3)	4	0.0524	0.0506	0.0527
	8	0.0496	0.0494	0.0485
TOEPH (3)	4	0.0571	0.0515	0.0522
	8	0.0786	0.0596	0.0526
UN	4	0.0524	0.0463	0.0505
	8	nc	0.0498	0.0513

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 25. Empirical values for type I error from the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with BANDH (3) covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.0213	0.0158	0.0138
	8	0.0492	0.0481	0.0429
CS	4	0.0796	0.0784	0.0812
	8	0.1057	0.1048	0.0971
CSH	4	0.0438	0.0520	0.0549
	8	0.0598	0.0765	0.0759
AR	4	0.0653	0.0682	0.0760
	8	0.0857	0.0887	0.0868
ARH	4	0.0543	0.0671	0.0713
	8	0.0615	0.0776	0.0788
TOEP	4	0.0557	0.0564	0.0615
	8	0.0759	0.0615	0.0611
TOEPH	4	0.0385 ^a	0.0453	0.0488
	8	0.0254	0.0566	0.0561
TOEP (2)	4	0.0554	0.0458	0.0481
	8	0.0751	0.0688	0.0611
TOEPH (2)	4	0.0459	0.0421	0.0418
	8	0.0587	0.0586	0.0608
TOEP (3)	4	0.0549	0.0543	0.0574
	8	0.0600	0.0601	0.0578
TOEPH (3)	4	0.0617 ^a	0.0511	0.0539
	8	0.0791	0.0600	0.0561
UN	4	0.0516	0.0476	0.0509
	8	nc	0.0487	0.0513

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

3. Statistical Power ($\alpha = 0.01$)

Table 26. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with I covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.01

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.1259	0.4020	0.6393
	8	0.1422	0.4569	0.7421
CS	4	0.1141	0.3839	0.6268
	8	0.1347	0.4467	0.7388
CSH	4	0.0748 ^a	0.3680	0.5924
	8	0.0700	0.3759	0.6861
AR	4	0.1000	0.3778	0.6239
	8	0.1300	0.4480	0.7347
ARH	4	0.0655	0.3293	0.5888
	8	0.0675	0.3706	0.6832
TOEP	4	0.1119 ^a	0.3665	0.6059
	8	0.1404	0.3761	0.6749
TOEPH	4	0.0531	0.2926	0.5531
	8	0.0148	0.2877	0.6158
TOEP (2)	4	0.1009	0.3772	0.6226
	8	0.1321	0.4489	0.7349
TOEPH (2)	4	0.0649	0.3260	0.5879
	8	0.0703	0.3696	0.6836
TOEP (3)	4	0.0983	0.3788	0.6291
	8	0.1126	0.4288	0.7224
TOEPH (3)	4	0.0520	0.3019	0.5672
	8	0.0491	0.3504	0.6699
UN	4	0.0486	0.2455	0.5067
	8	nc	0.1320	0.4416

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 27. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with VC covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.01

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.3089	0.7300	0.9264
	8	0.3087	0.7919	0.97
CS	4	0.2767	0.7152	0.9226
	8	0.2948	0.7846	0.9687
CSH	4	0.1947 ^a	0.7176	0.9384
	8	0.2507	0.8789	0.9928
AR	4	0.2481	0.7022	0.9181
	8	0.2826	0.7781	0.9680
ARH	4	0.1732	0.7120	0.9379
	8	0.2327	0.8723	0.9916
TOEP	4	0.2152	0.6743	0.9117
	8	0.2130	0.6744	0.9397
TOEPH	4	0.1059 ^a	0.6443	0.9158
	8	0.0427	0.7675	0.9805
TOEP (2)	4	0.2538	0.7000	0.9172
	8	0.2852	0.7782	0.9681
TOEPH (2)	4	0.1725 ^a	0.7087	0.9368
	8	0.2295	0.8726	0.9915
TOEP (3)	4	0.2371	0.6972	0.9199
	8	0.2499	0.7596	0.9647
TOEPH (3)	4	0.1193 ^a	0.6699	0.9304
	8	0.1727	0.8555	0.9905
UN	4	0.0909	0.5661	0.8871
	8	nc	0.4154	0.9072

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 28. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with CSH covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.01

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.2471	0.6115	0.9626
	8	0.2001	0.7115	0.9442
CS	4	0.8277	0.8978	1.0000
	8	0.2601	0.9978	1.0000
CSH	4	0.5933	0.9984	1.0000
	8	0.6938	0.9924	1.0000
AR	4	0.3995	0.9711	0.9984
	8	0.2129	0.9311	0.9735
ARH	4	0.3130	0.9712	0.9988
	8	0.2601	0.9312	0.9981
TOEP	4	0.5065	0.9997	0.9999
	8	0.4410	0.9797	0.9999
TOEPH	4	0.3633 ^a	0.9923	1.0000
	8	0.1869	0.9823	0.9999
TOEP (2)	4	0.3098	0.9043	0.9792
	8	0.1937	0.8033	0.9549
TOEPH (2)	4	0.1807 ^a	0.7689	0.9799
	8	0.1737	0.6689	0.9901
TOEP (3)	4	0.2212	0.6938	0.9627
	8	0.1565	0.5938	0.9548
TOEPH (3)	4	0.1174 ^a	0.7017	0.9776
	8	0.1220	0.6017	0.9910
UN	4	0.2454	0.9610	1.0000
	8	nc	0.8610	0.9991

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 29. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with ARH covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.01

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.2504	0.6794	0.9238
	8	0.2376	0.6156	0.8822
CS	4	0.6368	0.9629	0.9986
	8	0.5470	0.9028	0.9895
CSH	4	0.4283	0.9454	0.9975
	8	0.3875	0.9175	0.9952
AR	4	0.3763	0.8938	0.9911
	8	0.2009	0.6899	0.9420
ARH	4	0.2916	0.8881	0.9913
	8	0.2262	0.8658	0.9897
TOEP	4	0.2893	0.8474	0.9837
	8	0.1720	0.5811	0.9035
TOEPH	4	0.1720 ^a	0.8354	0.9859
	8	0.0484	0.7687	0.9827
TOEP (2)	4	0.3495	0.8289	0.9731
	8	0.2298	0.6658	0.9229
TOEPH (2)	4	0.2144 ^a	0.7875	0.9740
	8	0.1958	0.8011	0.9803
TOEP (3)	4	0.1914	0.6875	0.9366
	8	0.1721	0.6383	0.921
TOEPH (3)	4	0.1075 ^a	0.6685	0.9467
	8	0.1370	0.7916	0.9828
UN	4	0.1246	0.7545	0.9773
	8	nc	0.3896	0.8899

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 30. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with TOEP covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.01

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.0855	0.2938	0.5735
	8	0.1050	0.3021	0.5476
CS	4	0.4792	0.8593	0.9733
	8	0.4561	0.8041	0.9446
CSH	4	0.3156	0.8039	0.9630
	8	0.2554	0.7150	0.9119
AR	4	0.2288	0.7138	0.9325
	8	0.1072	0.4173	0.7152
ARH	4	0.1789	0.6915	0.9267
	8	0.0633	0.3799	0.6887
TOEP	4	0.1743 ^a	0.5817	0.8665
	8	0.1340	0.3767	0.6766
TOEPH	4	0.0940	0.5182	0.8360
	8	0.0239	0.2951	0.6191
TOEP (2)	4	0.1986	0.5845	0.8549
	8	0.1083	0.3467	0.6134
TOEPH (2)	4	0.0924	0.4319	0.7460
	8	0.0570	0.2413	0.5063
TOEP (3)	4	0.0825	0.3683	0.6897
	8	0.0847	0.3333	0.6235
TOEPH (3)	4	0.0447 ^a	0.2591	0.5683
	8	0.0422	0.2254	0.5081
UN	4	0.0666	0.4528	0.8060
	8	nc	0.1340	0.4298

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 31. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with TOEP (2) covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.01

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.1004	0.2923	0.4978
	8	0.1205	0.3175	0.5358
CS	4	0.1911	0.4698	0.6931
	8	0.1782	0.4194	0.6464
CSH	4	0.1235	0.4221	0.6638
	8	0.1008	0.3727	0.6270
AR	4	0.1018	0.3644	0.6072
	8	0.0701	0.2194	0.4352
ARH	4	0.0789	0.3627	0.6268
	8	0.0436	0.2213	0.4623
TOEP	4	0.1030 ^a	0.2746	0.4970
	8	0.1275	0.2683	0.4936
TOEPH	4	0.0538	0.2648	0.5172
	8	0.0135	0.2389	0.5065
TOEP (2)	4	0.1146	0.3686	0.6165
	8	0.0949	0.2679	0.4960
TOEPH (2)	4	0.0913	0.3493	0.6117
	8	0.0696	0.2559	0.5063
TOEP (3)	4	0.0845	0.2980	0.5405
	8	0.0644	0.1915	0.3984
TOEPH (3)	4	0.0552	0.2913	0.5564
	8	0.0387	0.2072	0.4644
UN	4	0.0416	0.2183	0.4712
	8	nc	0.1066	0.3549

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 32. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with TOEPH (2) covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.01

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.2450	0.5965	0.8408
	8	0.2339	0.5807	0.8453
CS	4	0.3663	0.7588	0.9312
	8	0.3156	0.6837	0.9061
CSH	4	0.2397	0.7246	0.9313
	8	0.2514	0.7805	0.9654
AR	4	0.2416	0.6802	0.9067
	8	0.1419	0.4658	0.7812
ARH	4	0.1762	0.6706	0.9125
	8	0.1374	0.6837	0.9402
TOEP	4	0.1922	0.5979	0.8606
	8	0.1918	0.4820	0.7995
TOEPH	4	0.0977	0.5613	0.8592
	8	0.0266	0.6629	0.9512
TOEP (2)	4	0.2688	0.7121	0.9182
	8	0.1860	0.5364	0.8328
TOEPH (2)	4	0.1767	0.6734	0.9165
	8	0.1790	0.7237	0.9532
TOEP (3)	4	0.1856	0.6233	0.8780
	8	0.1209	0.4303	0.7625
TOEPH (3)	4	0.1045	0.5949	0.8863
	8	0.0902	0.6657	0.9455
UN	4	0.0705	0.4708	0.8077
	8	nc	0.3482	0.8494

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 33. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with TOEP (3) covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.01

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.1047	0.3028	0.5479
	8	0.1326	0.3074	0.5479
CS	4	0.3734	0.7251	0.8950
	8	0.2442	0.4916	0.8950
CSH	4	0.2287	0.6414	0.8562
	8	0.1356	0.4313	0.8562
AR	4	0.2116	0.5919	0.8245
	8	0.0842	0.2615	0.8245
ARH	4	0.1657	0.5591	0.8064
	8	0.0513	0.2585	0.8064
TOEP	4	0.0865	0.3298	0.5930
	8	0.1120	0.2531	0.5930
TOEPH	4	0.0378	0.2517	0.5181
	8	0.0185	0.2193	0.5181
TOEP (2)	4	0.1712	0.4501	0.6984
	8	0.1186	0.2984	0.6984
TOEPH (2)	4	0.0756	0.3039	0.5491
	8	0.0729	0.2549	0.5491
TOEP (3)	4	0.0869	0.3252	0.5890
	8	0.0735	0.2637	0.5890
TOEPH (3)	4	0.0452	0.2591	0.5268
	8	0.0480	0.2321	0.5268
UN	4	0.0407	0.2315	0.4898
	8	nc	0.1050	0.4898

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 34. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with TOEPH (3) covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.01

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.2560	0.6372	0.8850
	8	0.2322	0.6022	0.8734
CS	4	0.5782	0.9012	0.9851
	8	0.3865	0.8142	0.9657
CSH	4	0.3635	0.8629	0.9839
	8	0.2858	0.7613	0.9154
AR	4	0.4049	0.8345	0.9734
	8	0.1582	0.6365	0.9237
ARH	4	0.2992	0.8212	0.9725
	8	0.1627	0.7215	0.9543
TOEP	4	0.2025	0.6736	0.9145
	8	0.1687	0.5736	0.8945
TOEPH	4	0.0837	0.6309	0.9155
	8	0.0399	0.4329	0.8940
TOEP (2)	4	0.3426	0.7418	0.9297
	8	0.2110	0.6410	0.9001
TOEPH (2)	4	0.1766	0.6490	0.9017
	8	0.1945	0.6034	0.8845
TOEP (3)	4	0.1852	0.6128	0.8766
	8	0.1450	0.5428	0.8766
TOEPH (3)	4	0.1268	0.6692	0.9264
	8	0.1161	0.6034	0.8999
UN	4	0.0783	0.5176	0.8571
	8	nc	0.4554	0.8206

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 35. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with BAND (3) covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.01

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.1036	0.3204	0.5730
	8	0.1341	0.2247	0.4640
CS	4	0.3216	0.6920	0.8839
	8	0.2384	0.5840	0.7719
CSH	4	0.2026	0.6136	0.8494
	8	0.1333	0.5256	0.7374
AR	4	0.1554	0.4460	0.6954
	8	0.1023	0.3370	0.5744
ARH	4	0.1150	0.4166	0.6770
	8	0.0579	0.4286	0.5340
TOEP	4	0.0913	0.3757	0.6527
	8	0.1118	0.2497	0.5477
TOEPH	4	0.0418	0.3014	0.5921
	8	0.0158	0.3484	0.4381
TOEP (2)	4	0.1325	0.3602	0.6033
	8	0.1215	0.2542	0.5303
TOEPH (2)	4	0.0721	0.2889	0.5338
	8	0.0688	0.2759	0.5658
TOEP (3)	4	0.1013	0.3892	0.6647
	8	0.0770	0.3572	0.5637
TOEPH (3)	4	0.0525	0.3132	0.6147
	8	0.0676	0.3132	0.5134
UN	4	0.0488	0.2820	0.5681
	8	nc	0.2523	0.4637

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 36. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with BANDH (3) covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.01

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.2577	0.7416	0.8989
	8	0.2453	0.6806	0.7988
CS	4	0.5222	0.8605	0.9845
	8	0.3923	0.7912	0.8844
CSH	4	0.3409	0.8592	0.9850
	8	0.2901	0.8298	0.8849
AR	4	0.3087	0.7928	0.9350
	8	0.1845	0.6648	0.8349
ARH	4	0.2258	0.8094	0.9494
	8	0.1654	0.7778	0.8493
TOEP	4	0.2112	0.7970	0.9367
	8	0.1661	0.6790	0.8366
TOEPH	4	0.0952	0.8217	0.9590
	8	0.0329	0.7672	0.8589
TOEP (2)	4	0.2764	0.7450	0.8995
	8	0.2220	0.6794	0.7994
TOEPH (2)	4	0.1759	0.7581	0.9080
	8	0.1910	0.7769	0.8079
TOEP (3)	4	0.2103	0.7781	0.9178
	8	0.1661	0.7219	0.8177
TOEPH (3)	4	0.1485	0.8305	0.9632
	8	0.1363	0.7924	0.8631
UN	4	0.0995	0.7929	0.9350
	8	nc	0.5519	0.8349

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

4. Statistical Power ($\alpha = 0.05$)

Table 37. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with I covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.3258	0.6575	0.8408
	8	0.3336	0.7074	0.8947
CS	4	0.3056	0.6485	0.8358
	8	0.3296	0.6985	0.8929
CSH	4	0.2521 ^a	0.6155	0.8188
	8	0.2356 ^b	0.6409	0.8709
AR	4	0.2922	0.6425	0.8339
	8	0.3216	0.6965	0.8893
ARH	4	0.2443	0.6143	0.8196
	8	0.2280	0.6394	0.8682
TOEP	4	0.2915 ^a	0.6325	0.8262
	8	0.2983 ^b	0.6381	0.8636
TOEPH	4	0.1892	0.5782	0.7965
	8	0.0715 ^c	0.5661	0.8371
TOEP (2)	4	0.2942	0.6419	0.8338
	8	0.3240	0.6973	0.8894
TOEPH (2)	4	0.2377	0.6103	0.819
	8	0.2259 ^b	0.6397	0.8682
TOEP (3)	4	0.2951	0.6456	0.8397
	8	0.3009	0.6836	0.8827
TOEPH (3)	4	0.2003	0.5889	0.8064
	8	0.1920 ^b	0.6237	0.8647
UN	4	0.1815	0.5410	0.7766
	8	nc	0.3808	0.7404

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 38. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with VC covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.5599	0.8953	0.9802
	8	0.5680	0.9379	0.9953
CS	4	0.5327	0.8901	0.9794
	8	0.5573	0.9348	0.9950
CSH	4	0.4865 ^a	0.9031	0.9840
	8	0.5541	0.9721	0.9993
AR	4	0.5118	0.8855	0.9791
	8	0.5459	0.9311	0.9948
ARH	4	0.4698	0.9003	0.9874
	8	0.5340	0.9677	0.9992
TOEP	4	0.4776	0.8769	0.9779
	8	0.4250	0.8801	0.9891
TOEPH	4	0.3556 ^a	0.8718	0.9822
	8	0.1719	0.9357	0.9979
TOEP (2)	4	0.5108	0.8842	0.9791
	8	0.5439	0.9310	0.9948
TOEPH (2)	4	0.4560 ^a	0.8998	0.9871
	8	0.5286	0.9668	0.9992
TOEP (3)	4	0.5047	0.8870	0.9802
	8	0.5157	0.9249	0.9937
TOEPH (3)	4	0.3796 ^a	0.8881	0.9858
	8	0.4535	0.9639	0.9992
UN	4	0.3063	0.8413	0.9774
	8	nc	0.7674	0.9882

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 39. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with CS covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.1889	0.6015	0.9137
	8	0.1433	0.4846	0.8595
CS	4	0.8882	0.9988	1.0000
	8	0.9419	0.9999	1.0000
CSH	4	0.7978	0.9981	1.0000
	8	0.8181	0.9994	1.0000
AR	4	0.4367	0.9249	0.9967
	8	0.2439	0.6350	0.9083
ARH	4	0.4017	0.9141	0.9960
	8	0.1963	0.6049	0.8846
TOEP	4	0.7580	0.9960	0.9999
	8	0.7589	0.9987	0.9999
TOEPH	4	0.6091	0.9941	0.9999
	8	0.3650c	0.9954	1.0000
TOEP (2)	4	0.3087	0.7422	0.9594
	8	0.1777	0.5386	0.8764
TOEPH (2)	4	0.2246	0.6453	0.9221
	8	0.1242	0.4216	0.7905
TOEP (3)	4	0.3017	0.7019	0.9474
	8	0.1817 ^b	0.5443	0.8751
TOEPH (3)	4	0.1757	0.5765	0.9031
	8	0.1134 ^b	0.4263	0.7844
UN	4	0.5529	0.9901	0.9999
	8	nc	0.9536	0.9999

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 40. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with CSH covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.4898	0.9150	0.9964
	8	0.3755	0.8539	0.9915
CS	4	0.9486	0.9997	1.0000
	8	0.9742	1.000	1.0000
CSH	4	0.8645	0.9996	1.0000
	8	0.9048	0.9998	1.0000
AR	4	0.7091	0.9907	1.0000
	8	0.4593	0.9272	0.9980
ARH	4	0.6761	0.9915	1.0000
	8	0.5738	0.9831	1.0000
TOEP	4	0.8121	0.9978	1.0000
	8	0.7168	0.9978	0.9999
TOEPH	4	0.7283 ^a	0.9984	1.0000
	8	0.4937	0.9993	1.0000
TOEP (2)	4	0.5888	0.9474	0.9976
	8	0.4030	0.8842	0.9943
TOEPH (2)	4	0.4765 ^a	0.9499	0.9987
	8	0.4142	0.9503	0.9995
TOEP (3)	4	0.4778	0.9185	0.9967
	8	0.3712	0.8788	0.9940
TOEPH (3)	4	0.3649 ^a	0.9402	0.9983
	8	0.3597	0.9511	0.9996
UN	4	0.6303	0.9966	1.0000
	8	nc	0.9717	1.0000

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 41. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with AR covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.2273	0.5637	0.8280
	8	0.2245	0.5071	0.7387
CS	4	0.6592	0.9362	0.9919
	8	0.5271	0.8195	0.9440
CSH	4	0.5319	0.9140	0.9891
	8	0.3779	0.7629	0.9203
AR	4	0.4219	0.8496	0.9750
	8	0.2561	0.6174	0.8351
ARH	4	0.3861	0.8388	0.9723
	8	0.1996	0.5900	0.8183
TOEP	4	0.4126	0.8274	0.9658
	8	0.2719	0.5898	0.8159
TOEPH	4	0.2965	0.7935	0.9623
	8	0.0719	0.5183	0.7827
TOEP (2)	4	0.3703	0.7614	0.9390
	8	0.2550	0.5732	0.8011
TOEPH (2)	4	0.2739	0.6760	0.9011
	8	0.1773 ^b	0.4904	0.7432
TOEP (3)	4	0.2522	0.6508	0.8900
	8	0.2338 ^b	0.5698	0.8052
TOEPH (3)	4	0.1769	0.5651	0.8410
	8	0.1446 ^b	0.4884	0.7441
UN	4	0.2688	0.7678	0.9552
	8	nc	0.3528	0.6660

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 42. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with ARH covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.4686	0.8729	0.9845
	8	0.4020	0.7870	0.9555
CS	4	0.8190	0.9897	0.9995
	8	0.7087	0.9591	0.9973
CSH	4	0.7188	0.9874	0.9994
	8	0.6386	0.9725	0.9991
AR	4	0.6496	0.9702	0.9982
	8	0.4323	0.8834	0.9894
ARH	4	0.6150	0.9770	0.9989
	8	0.5313	0.9664	0.9991
TOEP	4	0.5849	0.9609	0.9978
	8	0.3689	0.8374	0.9831
TOEPH	4	0.4771 ^a	0.9649	0.9984
	8	0.1745	0.9344	0.9980
TOEP (2)	4	0.6041	0.9455	0.9956
	8	0.4425	0.8537	0.9809
TOEPH (2)	4	0.5033 ^a	0.9430	0.9962
	8	0.4355	0.9352	0.9963
TOEP (3)	4	0.4497	0.8990	0.9900
	8	0.3947	0.8445	0.9836
TOEPH (3)	4	0.3620 ^a	0.9042	0.9936
	8	0.3677	0.9398	0.9973
UN	4	0.4103	0.9428	0.9971
	8	nc	0.7474	0.9831

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 43. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with TOEP covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.2291	0.5540	0.8265
	8	0.2089	0.4840	0.7286
CS	4	0.6823	0.9414	0.9915
	8	0.6132	0.8879	0.9759
CSH	4	0.5572	0.9176	0.9887
	8	0.4461	0.8410	0.9613
AR	4	0.4914	0.8837	0.9807
	8	0.2843	0.6687	0.8825
ARH	4	0.4496	0.8740	0.9798
	8	0.2214	0.6448	0.8704
TOEP	4	0.4107 ^a	0.8193	0.9630
	8	0.2916	0.6402	0.8668
TOEPH	4	0.2880	0.7789	0.9572
	8	0.0911 ^c	0.5609	0.8356
TOEP (2)	4	0.4245	0.7987	0.9540
	8	0.2459	0.5622	0.8022
TOEPH (2)	4	0.2886	0.6985	0.9137
	8	0.1634 ^b	0.4658	0.7373
TOEP (3)	4	0.2609	0.6700	0.9001
	8	0.2244	0.5812	0.8263
TOEPH (3)	4	0.1785 ^a	0.5685	0.8474
	8	0.1381 ^b	0.4743	0.7498
UN	4	0.2594	0.7517	0.9492
	8	nc	0.3855	0.7309

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 44. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with TOEPH covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.4653	0.8701	0.9811
	8	0.3880	0.7843	0.9523
CS	4	0.8350	0.9903	0.9989
	8	0.7921	0.9833	0.9994
CSH	4	0.7277	0.9884	0.9991
	8	0.7061	0.9875	0.9999
AR	4	0.7021	0.9811	0.9988
	8	0.4940	0.9241	0.9957
ARH	4	0.6631	0.9828	0.9991
	8	0.6100	0.9823	0.9997
TOEP	4	0.5980 ^a	0.9612	0.9968
	8	0.4100	0.8848	0.9909
TOEPH	4	0.4717 ^a	0.9640	0.9980
	8	0.2325	0.9627	0.9991
TOEP (2)	4	0.6447	0.9548	0.9955
	8	0.4448	0.8518	0.9805
TOEPH (2)	4	0.5334 ^a	0.9517	0.9962
	8	0.4377	0.9329	0.9967
TOEP (3)	4	0.4713	0.9056	0.9904
	8	0.4117	0.8677	0.9862
TOEPH (3)	4	0.3891 ^a	0.9244	0.9931
	8	0.3919	0.9489	0.9983
UN	4	0.4131	0.9444	0.9968
	8	nc	0.7961	0.9912

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 45. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with TOEP (2) covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.2372	0.5041	0.7152
	8	0.2578	0.5100	0.7227
CS	4	0.3753	0.6609	0.8408
	8	0.3372	0.6121	0.8059
CSH	4	0.3019	0.6329	0.8275
	8	0.2516	0.5809	0.7953
AR	4	0.2794	0.6031	0.8123
	8	0.2102	0.4559	0.6851
ARH	4	0.2557	0.6144	0.8219
	8	0.1640	0.4614	0.7077
TOEP	4	0.2589 ^a	0.5247	0.7497
	8	0.2627	0.5060	0.7389
TOEPH	4	0.1889	0.5298	0.7695
	8	0.0572	0.4859	0.7574
TOEP (2)	4	0.2969	0.6166	0.8216
	8	0.2434	0.5001	0.7233
TOEPH (2)	4	0.2639	0.6083	0.8203
	8	0.2022	0.4960	0.7320
TOEP (3)	4	0.2489	0.5587	0.7812
	8	0.1969	0.4369	0.6756
TOEPH (3)	4	0.1955	0.5593	0.7977
	8	0.1289	0.4627	0.7285
UN	4	0.1730	0.4894	0.743
	8	nc	0.3290	0.6634

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 46. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with TOEPH covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.01

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.4227	0.7935	0.9431
	8	0.4116	0.7722	0.9422
CS	4	0.5138	0.8903	0.9768
	8	0.5027	0.8449	0.9679
CSH	4	0.5080	0.8829	0.9790
	8	0.4970	0.9132	0.9912
AR	4	0.3467	0.8692	0.9736
	8	0.3356	0.7275	0.9343
ARH	4	0.3897	0.8743	0.9779
	8	0.3786	0.8761	0.9887
TOEP	4	0.3678	0.8285	0.9632
	8	0.3467	0.7384	0.9410
TOEPH	4	0.1229	0.8150	0.9657
	8	0.1017	0.8721	0.9913
TOEP (2)	4	0.4016	0.8864	0.9787
	8	0.3905	0.7711	0.9482
TOEPH (2)	4	0.4366	0.8757	0.9811
	8	0.4153	0.8952	0.9913
TOEP (3)	4	0.3227	0.8442	0.9687
	8	0.3015	0.7135	0.9315
TOEPH (3)	4	0.2783	0.8389	0.972
	8	0.2572	0.8809	0.9913
UN	4	0.2751	0.7650	0.9529
	8	nc	0.6975	0.9723

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 47. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with TOEP (3) covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.2334	0.5260	0.7634
	8	0.2507	0.4790	0.6900
CS	4	0.5572	0.8442	0.9502
	8	0.3890	0.6539	0.8300
CSH	4	0.4334	0.8029	0.9338
	8	0.2902	0.6088	0.8066
AR	4	0.4149	0.7784	0.9205
	8	0.2302	0.4950	0.7212
ARH	4	0.3756	0.7617	0.9122
	8	0.1801	0.4955	0.7396
TOEP	4	0.2613 ^a	0.5982	0.8154
	8	0.2450	0.5026	0.7457
TOEPH	4	0.1530 ^a	0.5203	0.7738
	8	0.0755	0.4692	0.7479
TOEP (2)	4	0.3458	0.6611	0.8455
	8	0.2553	0.4993	0.7164
TOEPH (2)	4	0.2262	0.5397	0.7735
	8	0.2048	0.4652	0.6939
TOEP (3)	4	0.2582	0.5908	0.8114
	8	0.2140	0.4949	0.7324
TOEPH (3)	4	0.1782	0.5397	0.7856
	8	0.1599	0.4704	0.7215
UN	4	0.1718	0.5140	0.7663
	8	nc	0.3177	0.6292

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 48. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with TOEPH (3) covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.4588	0.8200	0.9630
	8	0.3477	0.7199	0.9219
CS	4	0.7464	0.9563	0.9955
	8	0.6353	0.8452	0.9736
CSH	4	0.6239	0.9468	0.9953
	8	0.5128	0.8357	0.9898
AR	4	0.6299	0.9325	0.9912
	8	0.5188	0.8214	0.9527
ARH	4	0.5769	0.9340	0.9936
	8	0.4658	0.8239	0.9907
TOEP	4	0.4665 ^a	0.8655	0.9795
	8	0.3554 ^a	0.7544	0.9499
TOEPH	4	0.3135 ^a	0.8610	0.9815
	8	0.2024 ^a	0.7509	0.9925
TOEP (2)	4	0.5587	0.8777	0.9770
	8	0.4476	0.7667	0.9420
TOEPH (2)	4	0.4242 ^a	0.8426	0.9724
	8	0.3131 ^a	0.7315	0.9860
TOEP (3)	4	0.4288	0.8267	0.9673
	8	0.3177	0.7156	0.9562
TOEPH (3)	4	0.3918 ^a	0.8802	0.9833
	8	0.2807 ^a	0.7791	0.9888
UN	4	0.2917	0.8086	0.9689
	8	nc	0.7975	0.9657

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0% > c ≥ 70.0%; 70.0% > d ≥ 60.0%; nc < 60%.

Table 49. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with BAND (3) covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.2475	0.5583	0.7862
	8	0.2517	0.5210	0.7403
CS	4	0.5286	0.8383	0.9539
	8	0.3932	0.6781	0.8562
CSH	4	0.4158	0.8017	0.9409
	8	0.2907	0.6263	0.8299
AR	4	0.3417	0.6747	0.8662
	8	0.2352	0.4930	0.7195
ARH	4	0.2996	0.6564	0.8596
	8	0.1865	0.4690	0.7047
TOEP	4	0.2870 ^a	0.6480	0.8598
	8	0.2513	0.5246	0.7639
TOEPH	4	0.1654	0.5800	0.8314
	8	0.0628	0.4801	0.7479
TOEP (2)	4	0.2983	0.5959	0.8012
	8	0.2566	0.5142	0.7370
TOEPH (2)	4	0.2263	0.5374	0.7653
	8	0.1945	0.4745	0.7093
TOEP (3)	4	0.2952	0.6585	0.8631
	8	0.2281	0.5434	0.7822
TOEPH (3)	4	0.2043	0.6086	0.8429
	8	0.1690	0.5026	0.7540
UN	4	0.1895	0.5677	0.8156
	8	nc	0.3179	0.6318

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0 > c ≥ 70.0%; 70.0 > d ≥ 60.0%; nc < 60%.

Table 50. Statistical power for the hypothesis test of the interaction between treatments and repeated measures using mixed models with several covariance structures applied to simulated data with BANDH (3) covariance structure, with different numbers of repeated measures and sample sizes, and with statistical significance equal to 0.05

Covariance model	Repeated measure	Sample size		
		4	8	12
VC	4	0.4738	0.8426	0.9684
	8	0.4222	0.7816	0.9495
CS	4	0.7147	0.9615	0.9957
	8	0.5769	0.8912	0.9809
CSH	4	0.6186	0.9602	0.9973
	8	0.5329	0.9308	0.9922
AR	4	0.5388	0.8938	0.9827
	8	0.3845	0.7658	0.9489
ARH	4	0.5020	0.9104	0.9882
	8	0.4089	0.8788	0.9860
TOEP	4	0.4829 ^a	0.8980	0.9869
	8	0.3508	0.7800	0.9639
TOEPH	4	0.3461 ^a	0.9227	0.9929
	8	0.1305	0.8682	0.9899
TOEP (2)	4	0.4983	0.8460	0.9689
	8	0.4150	0.7804	0.9503
TOEPH (2)	4	0.4286 ^a	0.8591	0.9768
	8	0.4197	0.8779	0.9840
TOEP (3)	4	0.4613	0.8791	0.9820
	8	0.3915	0.8229	0.9704
TOEPH (3)	4	0.4191 ^a	0.9315	0.9942
	8	0.3288	0.8934	0.9908
UN	4	0.3435	0.8939	0.9893
	8	nc	0.6529	0.9566

Note. Except where specified, all values represent convergence greater than 99.9%.

Convergence: 99.9% > a ≥ 90.0%; 90.0% > b ≥ 80.0%; 80.0% > c ≥ 70.0%; 70.0% > d ≥ 60.0%; nc < 60%.