Appendix A. Error probability analysis information

Table 15. The error probability of four Bootstrap methods for the difference and ratio test with 16 combinations of (C_{a1}, σ_1) and (C_{a2}, σ_2) under $C_{pmk1} = C_{pmk2} = 1$.

USL=3, LSL=-3, d=3, m=0 resample=3000, N=3000, seed=113									n=100 (Difference Test)			n=100 (Ratio test)		
C_{pmk1}	μ_1	C_{a1}	σ_1	C_{pmk2}	μ_2	C_{a2}	σ_2	Bootstrap	Prob.	Lbound	Std	Prob.	Lbound	Std
1	0.6	0.8000	0.5292	1	0.6	0.8000	0.5292	SB	0.0493	-0.1845	0.1146	0.0407	0.8284	0.0935
								PB	0.0510	-0.1843	0.1159	0.0510	0.8394	0.0946
								BCPB	0.0513	-0.1845	0.1155	0.0510	0.8392	0.0943
								BT	0.0460	-0.1840	0.1125	0.0287	0.8129	0.0917
1	0.6	0.8000	0.5292	1	0.4	0.8667	0.7688	SB	0.0530	-0.1954	0.1226	0.0440	0.8171	0.1018
								PB	0.0553	-0.1935	0.1239	0.0553	0.8300	0.1031
								BCPB	0.0543	-0.1957	0.1237	0.0540	0.8281	0.1028
								BT	0.0473	-0.1989	0.1206	0.0297	0.7977	0.0999
1	0.6	0.8000	0.5292	1	0.2	0.9333	0.9117	SB	0.0520	-0.1924	0.1217	0.0430	0.8204	0.1008
								PB	0.0517	-0.1918	0.1227	0.0517	0.8318	0.1017
								BCPB	0.0587	-0.1910	0.1245	0.0577	0.8325	0.1035
								BT	0.0517	-0.1924	0.1210	0.0350	0.8043	0.1006

$USL=3$, $LSL=-3$, $d=3$, $m=0$ resample=3000, $N=3000$, seed=113									n=100 (Difference Test)			n=100 (Ratio test)		
C_{pmk1}	μ_1	C_{a1}	σ_1	C_{pmk2}	μ_2	C_{a2}	σ_2	Bootstrap	Prob.	Lbound	Std	Prob.	Lbound	Std
1	0.6	0.8000	0.5292	1	0	1.0000	1.0000	SB	0.0270	-0.2170	0.1151	0.0217	0.7991	0.0920
								PB	0.0283	-0.2178	0.1163	0.0283	0.8090	0.0931
								BCPB	0.0460	-0.1982	0.1189	0.0437	0.8250	0.0967
								BT	0.0333	-0.2059	0.1144	0.0200	0.7942	0.0925
1	0.4	0.8667	0.7688	1	0.6	0.8000	0.5292	SB	0.0477	-0.2023	0.1260	0.0367	0.8145	0.0980
								PB	0.0467	-0.2039	0.1275	0.0467	0.8272	0.0997
								BCPB	0.0463	-0.2013	0.1268	0.0467	0.8292	0.0997
								BT	0.0473	-0.1980	0.1236	0.0250	0.7976	0.0956
1	0.4	0.8667	0.7688	1	0.4	0.8667	0.7688	SB	0.0497	-0.2123	0.1335	0.0377	0.8041	0.1058
								PB	0.0513	-0.2121	0.1348	0.0513	0.8187	0.1075
								BCPB	0.0503	-0.2121	0.1344	0.0500	0.8186	0.1073
								BT	0.0473	-0.2117	0.1314	0.0247	0.7836	0.1035
1	0.4	0.8667	0.7688	1	0.2	0.9333	0.9117	SB	0.0497	-0.2094	0.1327	0.0387	0.8072	0.1049
								PB	0.0493	-0.2105	0.1338	0.0493	0.8205	0.1063
								BCPB	0.0570	-0.2074	0.1352	0.0557	0.8229	0.1080
								BT	0.0533	-0.2056	0.1316	0.0280	0.7899	0.1039
1	0.4	0.8667	0.7688	1	0	1.0000	1.0000	SB	0.0277	-0.2349	0.1265	0.0193	0.7857	0.0962
								PB	0.0270	-0.2374	0.1277	0.0270	0.7975	0.0977
								BCPB	0.0457	-0.2149	0.1297	0.0440	0.8150	0.1013
								BT	0.0357	-0.2201	0.1256	0.0170	0.7795	0.0963

$USL=3,\ LSL=-3,\ d=3,\ m=0$				resample=3000, $N=3000$, seed=113					$n=100$ (Difference Test)			$n=100$ (Ratio test)		
C_{pmk1}	μ_1	C_{a1}	σ_1	C_{pmk2}	μ_2	C_{a2}	σ_2	Bootstrap	Prob.	Lbound	Std	Prob.	Lbound	Std
1	0.2	0.9333	0.9117	1	0.6	0.8000	0.5292	SB	0.0497	-0.1928	0.1196	0.0380	0.8211	0.0952
								PB	0.0503	-0.1932	0.1207	0.0503	0.8338	0.0969
								BCPB	0.0527	-0.1942	0.1220	0.0537	0.8332	0.0977
								BT	0.0480	-0.1921	0.1186	0.0243	0.8029	0.0932
1	0.2	0.9333	0.9117	1	0.4	0.8667	0.7688	SB	0.0493	-0.2033	0.1278	0.0393	0.8102	0.1036
								PB	0.0530	-0.2021	0.1289	0.0530	0.8246	0.1054
								BCPB	0.0530	-0.2056	0.1302	0.0523	0.8221	0.1059
								BT	0.0457	-0.2064	0.1268	0.0237	0.7884	0.1015
1	0.2	0.9333	0.9117	1	0.2	0.9333	0.9117	SB	0.0470	-0.2003	0.1267	0.0370	0.8135	0.1023
								PB	0.0493	-0.2002	0.1276	0.0493	0.8267	0.1039
								BCPB	0.0560	-0.2004	0.1305	0.0573	0.8267	0.1062
								BT	0.0483	-0.2001	0.1270	0.0287	0.7948	0.1019
1	0.2	0.9333	0.9117	1	0	1.0000	1.0000	SB	0.0253	-0.2256	0.1201	0.0203	0.7920	0.0936
								PB	0.0263	-0.2270	0.1211	0.0263	0.8035	0.0951
								BCPB	0.0450	-0.2084	0.1252	0.0413	0.8186	0.0996
								BT	0.0337	-0.2141	0.1206	0.0163	0.7847	0.0941
1	0	1.0000	1.0000	1	0.6	0.8000	0.5292	SB	0.0893	-0.1463	0.1096	0.0710	0.8571	0.0948
								PB	0.0917	-0.1453	0.1108	0.0917	0.8694	0.0964
								BCPB	0.0707	-0.1639	0.1129	0.0693	0.8534	0.0956
								BT	0.0707	-0.1563	0.1084	0.0380	0.8302	0.0920

C_{pmk1}	μ_1	C_{a1}	σ_1	C_{pmk2}	μ_2	C_{a2}	σ_2	Bootstrap	Prob.	Lbound	Std	Prob.	Lbound	Std
USL=3, LSL=-3, d=3, m=0 resample=3000, N=3000, seed=113									n=100 (Difference Test)			n=100 (Ratio test)		
1	0	1.0000	1.0000	1	0.4	0.8667	0.7688	SB	0.0913	-0.1575	0.1185	0.0730	0.8454	0.1040
								PB	0.0973	-0.1548	0.1197	0.0973	0.8596	0.1056
								BCPB	0.0723	-0.1753	0.1216	0.0703	0.8419	0.1044
								BT	0.0660	-0.1713	0.1174	0.0427	0.8146	0.1009
1	0	1.0000	1.0000	1	0.2	0.9333	0.9117	SB	0.0923	-0.1543	0.1174	0.0757	0.8488	0.1027
								PB	0.0937	-0.1529	0.1183	0.0937	0.8616	0.1040
								BCPB	0.0793	-0.1705	0.1220	0.0750	0.8464	0.1049
								BT	0.0773	-0.1647	0.1175	0.0483	0.8216	0.1014
1	0	1.0000	1.0000	1	0	1.0000	1.0000	SB	0.0510	-0.1789	0.1096	0.0400	0.8266	0.0930
								PB	0.0540	-0.1788	0.1107	0.0540	0.8378	0.0943
								BCPB	0.0577	-0.1784	0.1148	0.0547	0.8384	0.0967
								BT	0.0523	-0.1782	0.1098	0.0270	0.8109	0.0922

Appendix B. Power analysis information

Table16. Selection power of the four bootstrap methods for the difference and ratio statistic for on-target process with $\mu_1 = \mu_2 = 0$ and sample size $n = 10(10)200$.

	C_{pmk1}	1		1		1		1		1	
	C_{pmk2}	1.05		1.1		1.15		1.2		1.25	
n	diff / ratio	diff	ratio	diff	ratio	diff	ratio	diff	ratio	diff	ratio
10	SB	0.0570	0.0217	0.0753	0.0310	0.0937	0.0427	0.1160	0.0550	0.1370	0.0653
	PB	0.0963	0.0963	0.1210	0.1210	0.1470	0.1470	0.1747	0.1747	0.2063	0.2063
	BCPB	0.0970	0.0810	0.1263	0.1110	0.1530	0.1353	0.1773	0.1623	0.2053	0.1837
	BT	0.0507	0.0050	0.0630	0.0100	0.0757	0.0120	0.0933	0.0150	0.1137	0.0167
20	SB	0.0617	0.0363	0.0887	0.0517	0.1213	0.0730	0.1643	0.1037	0.2153	0.1360
	PB	0.0727	0.0727	0.1047	0.1047	0.1463	0.1463	0.1900	0.1900	0.2417	0.2417
	BCPB	0.0827	0.0770	0.1150	0.1060	0.1557	0.1420	0.1983	0.1840	0.2467	0.2317
	BT	0.0573	0.0147	0.0810	0.0220	0.1117	0.0300	0.1500	0.0423	0.1880	0.0583
30	SB	0.0657	0.0407	0.1130	0.0697	0.1640	0.1137	0.2273	0.1633	0.2970	0.2257
	PB	0.0780	0.0780	0.1237	0.1237	0.1797	0.1797	0.2453	0.2453	0.3267	0.3267
	BCPB	0.0863	0.0773	0.1350	0.1247	0.1923	0.1787	0.2587	0.2460	0.3327	0.3123
	BT	0.0650	0.0193	0.1057	0.0313	0.1533	0.0540	0.2060	0.0857	0.2743	0.1257
40	SB	0.0770	0.0563	0.1243	0.0923	0.1960	0.1410	0.2803	0.2200	0.3760	0.3063
	PB	0.0800	0.0800	0.1327	0.1327	0.2123	0.2123	0.2997	0.2997	0.3977	0.3977
	BCPB	0.0903	0.0837	0.1447	0.1350	0.2160	0.2050	0.3027	0.2880	0.4007	0.3823
	BT	0.0743	0.0277	0.1187	0.0540	0.1787	0.0863	0.2617	0.1297	0.3573	0.1880
50	SB	0.0940	0.0733	0.1490	0.1187	0.2173	0.1833	0.3157	0.2617	0.4290	0.3590
	PB	0.0997	0.0997	0.1600	0.1600	0.2340	0.2340	0.3297	0.3297	0.4453	0.4453
	BCPB	0.1070	0.1010	0.1650	0.1580	0.2370	0.2263	0.3387	0.3217	0.4407	0.4263
	BT	0.0913	0.0387	0.1460	0.0770	0.2117	0.1213	0.2990	0.1857	0.4087	0.2590
60	SB	0.0927	0.0717	0.1660	0.1320	0.2657	0.2217	0.3690	0.3167	0.4790	0.4307
	PB	0.0983	0.0983	0.1740	0.1740	0.2763	0.2763	0.3817	0.3817	0.4923	0.4923
	BCPB	0.1113	0.1047	0.1850	0.1750	0.2870	0.2740	0.3880	0.3767	0.4997	0.4870
	BT	0.0913	0.0507	0.1610	0.0850	0.2590	0.1547	0.3630	0.2357	0.4703	0.3373
70	SB	0.0973	0.0777	0.1850	0.1433	0.2873	0.2433	0.4077	0.3617	0.5410	0.4843
	PB	0.1000	0.1000	0.1893	0.1893	0.2983	0.2983	0.4170	0.4170	0.5490	0.5490
	BCPB	0.1140	0.1087	0.1993	0.1880	0.3043	0.2923	0.4210	0.4107	0.5407	0.5293
	BT	0.0957	0.0510	0.1723	0.1030	0.2790	0.1793	0.3973	0.2753	0.5240	0.3907

	C_{pmk1}	1		1		1		1		1	
	C_{pmk2}	1.05		1.1		1.15		1.2		1.25	
n	diff / ratio	diff	ratio	diff	ratio	diff	ratio	diff	ratio	diff	ratio
80	SB	0.0977	0.0793	0.1850	0.1547	0.3157	0.2733	0.4633	0.4150	0.5903	0.5487
	PB	0.1027	0.1027	0.1937	0.1937	0.3247	0.3247	0.4707	0.4707	0.5997	0.5997
	BCPB	0.1133	0.1070	0.2030	0.1933	0.3303	0.3190	0.4680	0.4553	0.6020	0.5877
	BT	0.0977	0.0557	0.1827	0.1120	0.3107	0.1983	0.4503	0.3203	0.5843	0.4547
90	SB	0.1090	0.0890	0.2147	0.1773	0.3420	0.3037	0.4937	0.4553	0.6377	0.5980
	PB	0.1120	0.1120	0.2170	0.2170	0.3503	0.3503	0.4997	0.4997	0.6457	0.6457
	BCPB	0.1187	0.1137	0.2253	0.2183	0.3550	0.3450	0.5037	0.4910	0.6380	0.6260
	BT	0.1063	0.0620	0.2080	0.1327	0.3393	0.2467	0.4850	0.3670	0.6283	0.5093
100	SB	0.1163	0.0960	0.2263	0.1910	0.3723	0.3377	0.5210	0.4840	0.6710	0.6323
	PB	0.1210	0.1210	0.2300	0.2300	0.3817	0.3817	0.5270	0.5270	0.6770	0.6770
	BCPB	0.1323	0.1250	0.2323	0.2250	0.3850	0.3723	0.5330	0.5227	0.6663	0.6563
	BT	0.1140	0.0720	0.2173	0.1487	0.3690	0.2670	0.5130	0.4127	0.6583	0.5540
110	SB	0.1110	0.0937	0.2303	0.2013	0.3923	0.3530	0.5710	0.5257	0.7277	0.6850
	PB	0.1147	0.1147	0.2350	0.2350	0.3980	0.3980	0.5790	0.5790	0.7327	0.7327
	BCPB	0.1277	0.1217	0.2400	0.2313	0.4053	0.3970	0.5730	0.5627	0.7267	0.7183
	BT	0.1120	0.0717	0.2263	0.1550	0.3883	0.2900	0.5613	0.4530	0.7207	0.6077
120	SB	0.1123	0.0950	0.2407	0.2167	0.4127	0.3733	0.5910	0.5487	0.7423	0.7147
	PB	0.1153	0.1153	0.2460	0.2460	0.4160	0.4160	0.5943	0.5943	0.7463	0.7463
	BCPB	0.1290	0.1203	0.2590	0.2520	0.4117	0.4013	0.5850	0.5723	0.7360	0.7280
	BT	0.1143	0.0723	0.2433	0.1740	0.3990	0.3123	0.5750	0.4750	0.7320	0.6420
130	SB	0.1160	0.0973	0.2540	0.2280	0.4230	0.3883	0.6167	0.5817	0.7770	0.7473
	PB	0.1200	0.1200	0.2570	0.2570	0.4267	0.4267	0.6220	0.6220	0.7820	0.7820
	BCPB	0.1303	0.1263	0.2750	0.2640	0.4297	0.4200	0.6197	0.6083	0.7693	0.7643
	BT	0.1160	0.0750	0.2560	0.1787	0.4183	0.3370	0.6083	0.5127	0.7637	0.6900
140	SB	0.1270	0.1083	0.2793	0.2517	0.4703	0.4327	0.6607	0.6213	0.8147	0.7850
	PB	0.1300	0.1300	0.2817	0.2817	0.4780	0.4780	0.6620	0.6620	0.8167	0.8167
	BCPB	0.1427	0.1367	0.2953	0.2863	0.4740	0.4647	0.6543	0.6447	0.8003	0.7933
	BT	0.1323	0.0867	0.2773	0.2077	0.4613	0.3763	0.6500	0.5613	0.8020	0.7313

	C_{pmk1}	1		1		1		1		1	
	C_{pmk2}	1.05		1.1		1.15		1.2		1.25	
n	diff / ratio	diff	ratio	diff	ratio	diff	ratio	diff	ratio	diff	ratio
150	SB	0.1357	0.1150	0.2853	0.2580	0.4913	0.4567	0.6837	0.6517	0.8277	0.8087
	PB	0.1367	0.1367	0.2913	0.2913	0.4977	0.4977	0.6880	0.6880	0.8303	0.8303
	BCPB	0.1390	0.1357	0.2973	0.2893	0.4973	0.4850	0.6777	0.6697	0.8200	0.8143
	BT	0.1353	0.0917	0.2880	0.2147	0.4823	0.3970	0.6733	0.5897	0.8193	0.7597
160	SB	0.1330	0.1153	0.2877	0.2567	0.5070	0.4747	0.6980	0.6653	0.8517	0.8333
	PB	0.1363	0.1363	0.2900	0.2900	0.5100	0.5100	0.7010	0.7010	0.8517	0.8517
	BCPB	0.1477	0.1417	0.2943	0.2853	0.5157	0.5057	0.6930	0.6850	0.8420	0.8370
	BT	0.1360	0.0887	0.2830	0.2157	0.5060	0.4120	0.6940	0.6040	0.8433	0.7823
170	SB	0.1383	0.1183	0.3080	0.2797	0.5357	0.5090	0.7400	0.7140	0.8697	0.8493
	PB	0.1390	0.1390	0.3107	0.3107	0.5397	0.5397	0.7430	0.7430	0.8743	0.8743
	BCPB	0.1483	0.1420	0.3157	0.3060	0.5430	0.5323	0.7253	0.7210	0.8670	0.8603
	BT	0.1367	0.0963	0.3060	0.2343	0.5310	0.4480	0.7257	0.6587	0.8617	0.8150
180	SB	0.1387	0.1227	0.3263	0.2997	0.5500	0.5173	0.7570	0.7333	0.8903	0.8807
	PB	0.1423	0.1423	0.3293	0.3293	0.5537	0.5537	0.7593	0.7593	0.8920	0.8920
	BCPB	0.1543	0.1473	0.3353	0.3260	0.5513	0.5450	0.7523	0.7430	0.8810	0.8763
	BT	0.1387	0.1047	0.3250	0.2533	0.5430	0.4630	0.7470	0.6780	0.8837	0.8407
190	SB	0.1430	0.1237	0.3280	0.3057	0.5653	0.5380	0.7757	0.7460	0.9080	0.8900
	PB	0.1467	0.1467	0.3337	0.3337	0.5737	0.5737	0.7777	0.7777	0.9107	0.9107
	BCPB	0.1567	0.1513	0.3427	0.3360	0.5660	0.5573	0.7637	0.7563	0.8980	0.8937
	BT	0.1447	0.1053	0.3320	0.2630	0.5607	0.4797	0.7617	0.6973	0.9000	0.8517
200	SB	0.1540	0.1390	0.3537	0.3240	0.5930	0.5703	0.7987	0.7767	0.9263	0.9140
	PB	0.1580	0.1580	0.3567	0.3567	0.5973	0.5973	0.8013	0.8013	0.9250	0.9250
	BCPB	0.1743	0.1700	0.3620	0.3543	0.5917	0.5840	0.7887	0.7823	0.9143	0.9123
	BT	0.1627	0.1167	0.3517	0.2803	0.5883	0.5240	0.7897	0.7317	0.9187	0.8813

	C_{pmk1}	1		1		1		1		1	
	C_{pmk2}	1.30		1.35		1.40		1.45		1.50	
n	diff / ratio	diff	ratio	diff	ratio	diff	ratio	diff	ratio	diff	ratio
10	SB	0.1633	0.0810	0.1893	0.0937	0.2200	0.1077	0.2537	0.1270	0.2827	0.1483
	PB	0.2400	0.2400	0.2777	0.2777	0.3083	0.3083	0.3460	0.3460	0.3857	0.3857
	BCPB	0.2407	0.2180	0.2743	0.2483	0.3133	0.2870	0.3503	0.3197	0.3783	0.3517
	BT	0.1347	0.0207	0.1543	0.0263	0.1747	0.0333	0.2023	0.0397	0.2300	0.0463
20	SB	0.2607	0.1790	0.3133	0.2193	0.3730	0.2687	0.4330	0.3200	0.4870	0.3750
	PB	0.2957	0.2957	0.3590	0.3590	0.4180	0.4180	0.4827	0.4827	0.5417	0.5417
	BCPB	0.2993	0.2800	0.3600	0.3357	0.4230	0.3993	0.4843	0.4587	0.5347	0.5153
	BT	0.2320	0.0777	0.2823	0.1003	0.3367	0.1317	0.3923	0.1643	0.4457	0.1933
30	SB	0.3807	0.2910	0.4553	0.3657	0.5337	0.4387	0.5943	0.5123	0.6590	0.5803
	PB	0.4073	0.4073	0.4860	0.4860	0.5607	0.5607	0.6227	0.6227	0.6863	0.6863
	BCPB	0.4020	0.3883	0.4820	0.4673	0.5523	0.5363	0.6210	0.6020	0.6800	0.6667
	BT	0.3533	0.1700	0.4223	0.2213	0.4913	0.2780	0.5563	0.3453	0.6163	0.4063
40	SB	0.4743	0.4003	0.5600	0.4840	0.6437	0.5723	0.7143	0.6543	0.7780	0.7193
	PB	0.4930	0.4930	0.5797	0.5797	0.6593	0.6593	0.7307	0.7307	0.7957	0.7957
	BCPB	0.4873	0.4743	0.5707	0.5570	0.6513	0.6363	0.7250	0.7137	0.7833	0.7750
	BT	0.4460	0.2640	0.5357	0.3490	0.6160	0.4293	0.6893	0.5120	0.7510	0.5890
50	SB	0.5327	0.4667	0.6260	0.5647	0.7137	0.6557	0.7977	0.7447	0.8603	0.8170
	PB	0.5473	0.5473	0.6380	0.6380	0.7277	0.7277	0.8097	0.8097	0.8700	0.8700
	BCPB	0.5387	0.5233	0.6327	0.6223	0.7220	0.7113	0.8023	0.7933	0.8583	0.8493
	BT	0.5057	0.3443	0.6023	0.4457	0.6903	0.5440	0.7733	0.6210	0.8443	0.7117
60	SB	0.6053	0.5417	0.7033	0.6523	0.7893	0.7450	0.8590	0.8227	0.9077	0.8813
	PB	0.6130	0.6130	0.7203	0.7203	0.8010	0.8010	0.8670	0.8670	0.9120	0.9120
	BCPB	0.6073	0.5877	0.7083	0.6963	0.7907	0.7810	0.8580	0.8490	0.9070	0.9017
	BT	0.5787	0.4340	0.6857	0.5440	0.7700	0.6463	0.8423	0.7337	0.8953	0.8113
70	SB	0.6650	0.6117	0.7583	0.7217	0.8387	0.8060	0.8957	0.8693	0.9397	0.9183
	PB	0.6740	0.6740	0.7687	0.7687	0.8447	0.8447	0.9000	0.9000	0.9423	0.9423
	BCPB	0.6593	0.6453	0.7583	0.7483	0.8380	0.8330	0.8957	0.8920	0.9357	0.9287
	BT	0.6403	0.5083	0.7457	0.6260	0.8230	0.7307	0.8900	0.8063	0.9303	0.8727

n	diff / ratio	C_{pmk2} 1.30 diff	ratio	1.35 diff	ratio	1.40 diff	ratio	1.45 diff	ratio	1.50 diff	ratio
	C_{pmk1}	1		1		1		1		1	
80	SB	0.7213	0.6800	0.8163	0.7827	0.8790	0.8533	0.9263	0.9117	0.9647	0.9513
	PB	0.7280	0.7280	0.8210	0.8210	0.8827	0.8827	0.9300	0.9300	0.9667	0.9667
	BCPB	0.7193	0.7123	0.8150	0.8080	0.8770	0.8697	0.9243	0.9200	0.9593	0.9560
	BT	0.7117	0.5893	0.8007	0.7110	0.8697	0.8007	0.9220	0.8663	0.9580	0.9173
90	SB	0.7607	0.7263	0.8517	0.8270	0.9123	0.8930	0.9537	0.9390	0.9760	0.9697
	PB	0.7683	0.7683	0.8580	0.8580	0.9150	0.9150	0.9550	0.9550	0.9783	0.9783
	BCPB	0.7583	0.7490	0.8477	0.8393	0.9067	0.9037	0.9443	0.9417	0.9743	0.9707
	BT	0.7467	0.6450	0.8387	0.7610	0.9040	0.8493	0.9433	0.9097	0.9727	0.9467
100	SB	0.7887	0.7567	0.8773	0.8523	0.9350	0.9200	0.9653	0.9583	0.9837	0.9780
	PB	0.7940	0.7940	0.8823	0.8823	0.9377	0.9377	0.9677	0.9677	0.9843	0.9843
	BCPB	0.7863	0.7797	0.8743	0.8670	0.9343	0.9320	0.9640	0.9623	0.9827	0.9813
	BT	0.7800	0.6907	0.8663	0.8020	0.9307	0.8813	0.9630	0.9397	0.9807	0.9657
110	SB	0.8523	0.8230	0.9230	0.9083	0.9623	0.9547	0.9820	0.9773	0.9903	0.9893
	PB	0.8550	0.8550	0.9260	0.9260	0.9633	0.9633	0.9840	0.9840	0.9907	0.9907
	BCPB	0.8467	0.8410	0.9167	0.9133	0.9580	0.9553	0.9810	0.9803	0.9903	0.9900
	BT	0.8417	0.7607	0.9150	0.8693	0.9587	0.9303	0.9797	0.9643	0.9897	0.9837
120	SB	0.8597	0.8367	0.9337	0.9183	0.9723	0.9633	0.9880	0.9837	0.9953	0.9943
	PB	0.8640	0.8640	0.9353	0.9353	0.9733	0.9733	0.9883	0.9883	0.9957	0.9957
	BCPB	0.8560	0.8487	0.9277	0.9250	0.9670	0.9663	0.9847	0.9840	0.9950	0.9947
	BT	0.8510	0.7790	0.9263	0.8827	0.9673	0.9430	0.9863	0.9757	0.9953	0.9890
130	SB	0.8890	0.8703	0.9500	0.9393	0.9770	0.9743	0.9913	0.9880	0.9980	0.9967
	PB	0.8907	0.8907	0.9510	0.9510	0.9773	0.9773	0.9913	0.9913	0.9983	0.9983
	BCPB	0.8780	0.8737	0.9433	0.9400	0.9740	0.9733	0.9890	0.9880	0.9963	0.9960
	BT	0.8787	0.8207	0.9443	0.9097	0.9753	0.9570	0.9897	0.9817	0.9967	0.9933
140	SB	0.9033	0.8877	0.9637	0.9563	0.9867	0.9830	0.9950	0.9943	0.9987	0.9980
	PB	0.9053	0.9053	0.9640	0.9640	0.9870	0.9870	0.9957	0.9957	0.9983	0.9983
	BCPB	0.8983	0.8960	0.9570	0.9537	0.9847	0.9840	0.9957	0.9957	0.9983	0.9983
	BT	0.8933	0.8520	0.9577	0.9313	0.9853	0.9697	0.9953	0.9910	0.9983	0.9963

	C_{pmk1}	1		1		1		1		1	
	C_{pmk2}	1.30		1.35		1.40		1.45		1.50	
n	diff / ratio	diff	ratio	diff	ratio	diff	ratio	diff	ratio	diff	ratio
150	SB	0.9233	0.9093	0.9743	0.9690	0.9907	0.9880	0.9970	0.9957	0.9993	0.9993
	PB	0.9237	0.9237	0.9750	0.9750	0.9913	0.9913	0.9970	0.9970	0.9993	0.9993
	BCPB	0.9157	0.9140	0.9683	0.9653	0.9890	0.9880	0.9957	0.9960	0.9997	0.9993
	BT	0.9183	0.8710	0.9677	0.9470	0.9890	0.9823	0.9970	0.9937	0.9993	0.9983
160	SB	0.9387	0.9267	0.9760	0.9720	0.9930	0.9903	0.9980	0.9980	0.9997	0.9993
	PB	0.9397	0.9397	0.9763	0.9763	0.9930	0.9930	0.9980	0.9980	0.9997	0.9997
	BCPB	0.9250	0.9233	0.9730	0.9710	0.9907	0.9900	0.9983	0.9980	0.9993	0.9993
	BT	0.9333	0.8953	0.9747	0.9593	0.9920	0.9840	0.9980	0.9960	0.9993	0.9990
170	SB	0.9480	0.9367	0.9810	0.9763	0.9950	0.9933	0.9987	0.9980	1.0000	1.0000
	PB	0.9490	0.9490	0.9810	0.9810	0.9947	0.9947	0.9987	0.9987	1.0000	1.0000
	BCPB	0.9437	0.9407	0.9760	0.9743	0.9933	0.9930	0.9980	0.9980	1.0000	1.0000
	BT	0.9447	0.9197	0.9790	0.9630	0.9940	0.9903	0.9983	0.9977	1.0000	0.9993
180	SB	0.9547	0.9483	0.9860	0.9810	0.9957	0.9953	0.9990	0.9990	0.9993	0.9993
	PB	0.9560	0.9560	0.9857	0.9857	0.9963	0.9963	0.9990	0.9990	0.9997	0.9997
	BCPB	0.9493	0.9473	0.9830	0.9823	0.9943	0.9943	0.9987	0.9987	0.9993	0.9993
	BT	0.9507	0.9293	0.9833	0.9727	0.9957	0.9920	0.9987	0.9977	0.9993	0.9993
190	SB	0.9667	0.9617	0.9900	0.9863	0.9973	0.9963	0.9997	0.9993	1.0000	1.0000
	PB	0.9677	0.9677	0.9900	0.9900	0.9970	0.9970	0.9997	0.9997	1.0000	1.0000
	BCPB	0.9633	0.9607	0.9870	0.9853	0.9973	0.9967	0.9993	0.9993	1.0000	1.0000
	BT	0.9660	0.9433	0.9867	0.9820	0.9970	0.9947	0.9993	0.9993	1.0000	1.0000
200	SB	0.9743	0.9713	0.9920	0.9900	0.9993	0.9987	1.0000	1.0000	1.0000	1.0000
	PB	0.9747	0.9747	0.9923	0.9923	0.9993	0.9993	1.0000	1.0000	1.0000	1.0000
	BCPB	0.9710	0.9697	0.9903	0.9900	0.9987	0.9987	1.0000	1.0000	1.0000	1.0000
	BT	0.9720	0.9597	0.9910	0.9870	0.9983	0.9973	1.0000	0.9997	1.0000	1.0000

Table 17. Selection power of the four bootstrap methods for the difference and ratio statistic for off-target process with $\mu_1 = \mu_2 = 0.4$ and sample size $n = 10(10)200$.

	C_{pmk1}	1		1		1		1		1	
	C_{pmk2}	1.05		1.1		1.15		1.2		1.25	
n	diff / ratio	diff	ratio	diff	ratio	diff	ratio	diff	ratio	diff	ratio
10	SB	0.0600	0.0250	0.0750	0.0333	0.0893	0.0423	0.1053	0.0517	0.1243	0.0647
	PB	0.0913	0.0913	0.1110	0.1110	0.1320	0.1320	0.1593	0.1593	0.1830	0.1830
	BCPB	0.0947	0.0867	0.1113	0.1070	0.1340	0.1277	0.1623	0.1550	0.1837	0.1753
	BT	0.0523	0.0067	0.0630	0.0120	0.0760	0.0127	0.0883	0.0170	0.1057	0.0193
20	SB	0.0723	0.0400	0.0973	0.0563	0.1297	0.0733	0.1647	0.0957	0.1990	0.1277
	PB	0.0857	0.0857	0.1183	0.1183	0.1523	0.1523	0.1863	0.1863	0.2220	0.2220
	BCPB	0.0903	0.0897	0.1180	0.1173	0.1500	0.1470	0.1830	0.1823	0.2197	0.2163
	BT	0.0650	0.0163	0.0853	0.0217	0.1097	0.0297	0.1390	0.0390	0.1753	0.0530
30	SB	0.0733	0.0433	0.1050	0.0683	0.1463	0.0987	0.1903	0.1377	0.2433	0.1767
	PB	0.0840	0.0840	0.1190	0.1190	0.1640	0.1640	0.2103	0.2103	0.2630	0.2630
	BCPB	0.0847	0.0827	0.1183	0.1187	0.1597	0.1597	0.2073	0.2083	0.2647	0.2647
	BT	0.0633	0.0177	0.0903	0.0293	0.1263	0.0430	0.1683	0.0613	0.2207	0.0900
40	SB	0.0880	0.0613	0.1297	0.0913	0.1787	0.1327	0.2383	0.1787	0.3077	0.2397
	PB	0.0943	0.0943	0.1413	0.1413	0.1903	0.1903	0.2520	0.2520	0.3250	0.3250
	BCPB	0.0960	0.0963	0.1393	0.1390	0.1877	0.1887	0.2537	0.2527	0.3277	0.3293
	BT	0.0807	0.0290	0.1180	0.0490	0.1600	0.0753	0.2167	0.1123	0.2913	0.1497
50	SB	0.0860	0.0623	0.1313	0.0970	0.1940	0.1513	0.2680	0.2140	0.3547	0.2857
	PB	0.0907	0.0907	0.1397	0.1397	0.2033	0.2033	0.2773	0.2773	0.3693	0.3693
	BCPB	0.0893	0.0893	0.1403	0.1400	0.2043	0.2043	0.2767	0.2787	0.3673	0.3690
	BT	0.0800	0.0347	0.1190	0.0587	0.1810	0.0893	0.2553	0.1397	0.3363	0.1993
60	SB	0.0893	0.0593	0.1437	0.1120	0.2233	0.1737	0.3127	0.2597	0.4093	0.3523
	PB	0.0943	0.0943	0.1523	0.1523	0.2337	0.2337	0.3217	0.3217	0.4223	0.4223
	BCPB	0.0957	0.0950	0.1523	0.1537	0.2320	0.2317	0.3223	0.3223	0.4210	0.4227
	BT	0.0837	0.0357	0.1350	0.0650	0.2057	0.1133	0.3010	0.1703	0.3977	0.2580
70	SB	0.0893	0.0680	0.1627	0.1240	0.2430	0.2007	0.3470	0.2960	0.4593	0.3920
	PB	0.0937	0.0937	0.1707	0.1707	0.2523	0.2523	0.3567	0.3567	0.4690	0.4690
	BCPB	0.0937	0.0930	0.1663	0.1677	0.2503	0.2520	0.3590	0.3590	0.4677	0.4680
	BT	0.0877	0.0407	0.1523	0.0767	0.2337	0.1377	0.3327	0.2140	0.4423	0.3103

	C_{pmk1}	1		1		1		1		1	
	C_{pmk2}	1.05		1.1		1.15		1.2		1.25	
n	diff / ratio	diff	ratio	diff	ratio	diff	ratio	diff	ratio	diff	ratio
80	SB	0.0980	0.0747	0.1687	0.1363	0.2550	0.2173	0.3653	0.3157	0.4917	0.4340
	PB	0.1013	0.1013	0.1760	0.1760	0.2633	0.2633	0.3727	0.3727	0.5013	0.5013
	BCPB	0.1020	0.1017	0.1740	0.1747	0.2607	0.2637	0.3700	0.3703	0.4997	0.4973
	BT	0.0930	0.0493	0.1643	0.0927	0.2463	0.1627	0.3527	0.2433	0.4810	0.3417
90	SB	0.1043	0.0810	0.1800	0.1447	0.2833	0.2367	0.4067	0.3557	0.5290	0.4767
	PB	0.1060	0.1060	0.1847	0.1847	0.2897	0.2897	0.4140	0.4140	0.5367	0.5367
	BCPB	0.1043	0.1050	0.1860	0.1863	0.2903	0.2897	0.4147	0.4147	0.5363	0.5390
	BT	0.0990	0.0557	0.1720	0.1037	0.2757	0.1797	0.3977	0.2817	0.5200	0.4027
100	SB	0.1053	0.0853	0.1890	0.1593	0.3047	0.2593	0.4330	0.3797	0.5627	0.5203
	PB	0.1077	0.1077	0.1983	0.1983	0.3100	0.3100	0.4423	0.4423	0.5710	0.5710
	BCPB	0.1063	0.1080	0.1957	0.1963	0.3077	0.3087	0.4390	0.4407	0.5743	0.5740
	BT	0.1007	0.0583	0.1823	0.1137	0.2910	0.2017	0.4240	0.3117	0.5590	0.4417
110	SB	0.1097	0.0877	0.1910	0.1653	0.3103	0.2737	0.4510	0.4070	0.6067	0.5533
	PB	0.1130	0.1130	0.1960	0.1960	0.3153	0.3153	0.4580	0.4580	0.6133	0.6133
	BCPB	0.1113	0.1110	0.1953	0.1963	0.3183	0.3210	0.4587	0.4597	0.6107	0.6127
	BT	0.1020	0.0613	0.1833	0.1243	0.3023	0.2183	0.4433	0.3330	0.6007	0.4730
120	SB	0.1147	0.0957	0.2100	0.1810	0.3417	0.3007	0.4743	0.4350	0.6363	0.5877
	PB	0.1160	0.1160	0.2167	0.2167	0.3457	0.3457	0.4787	0.4787	0.6413	0.6413
	BCPB	0.1180	0.1180	0.2143	0.2157	0.3423	0.3453	0.4783	0.4780	0.6440	0.6433
	BT	0.1120	0.0693	0.2050	0.1383	0.3303	0.2437	0.4723	0.3730	0.6287	0.5137
130	SB	0.1193	0.0997	0.2193	0.1900	0.3493	0.3103	0.5023	0.4613	0.6523	0.6103
	PB	0.1223	0.1223	0.2233	0.2233	0.3553	0.3553	0.5040	0.5040	0.6533	0.6533
	BCPB	0.1207	0.1203	0.2187	0.2193	0.3560	0.3593	0.5037	0.5047	0.6567	0.6570
	BT	0.1160	0.0697	0.2123	0.1493	0.3420	0.2633	0.4950	0.4007	0.6500	0.5503
140	SB	0.1107	0.0927	0.2140	0.1843	0.3580	0.3240	0.5287	0.4857	0.6843	0.6513
	PB	0.1140	0.1140	0.2197	0.2197	0.3640	0.3640	0.5303	0.5303	0.6867	0.6867
	BCPB	0.1127	0.1117	0.2160	0.2177	0.3597	0.3603	0.5330	0.5330	0.6907	0.6913
	BT	0.1050	0.0677	0.2090	0.1427	0.3500	0.2677	0.5217	0.4237	0.6837	0.5810

	C_{pmk1}	1		1		1		1		1	
	C_{pmk2}	1.05		1.1		1.15		1.2		1.25	
n	diff / ratio	diff	ratio	diff	ratio	diff	ratio	diff	ratio	diff	ratio
150	SB	0.1247	0.1040	0.2420	0.2100	0.3873	0.3560	0.5553	0.5133	0.7113	0.6813
	PB	0.1277	0.1277	0.2447	0.2447	0.3923	0.3923	0.5590	0.5590	0.7170	0.7170
	BCPB	0.1280	0.1283	0.2447	0.2457	0.3937	0.3937	0.5600	0.5613	0.7163	0.7177
	BT	0.1247	0.0840	0.2353	0.1680	0.3827	0.2973	0.5497	0.4527	0.7110	0.6213
160	SB	0.1270	0.1117	0.2463	0.2193	0.4050	0.3703	0.5770	0.5390	0.7450	0.7127
	PB	0.1287	0.1287	0.2470	0.2470	0.4107	0.4107	0.5790	0.5790	0.7460	0.7460
	BCPB	0.1257	0.1260	0.2477	0.2487	0.4097	0.4123	0.5800	0.5793	0.7460	0.7480
	BT	0.1253	0.0870	0.2420	0.1790	0.3983	0.3177	0.5743	0.4850	0.7410	0.6513
170	SB	0.1303	0.1080	0.2573	0.2310	0.4250	0.3927	0.6020	0.5703	0.7687	0.7373
	PB	0.1323	0.1323	0.2627	0.2627	0.4293	0.4293	0.6043	0.6043	0.7703	0.7703
	BCPB	0.1323	0.1317	0.2617	0.2620	0.4313	0.4307	0.6080	0.6080	0.7707	0.7710
	BT	0.1240	0.0827	0.2527	0.1900	0.4213	0.3370	0.5987	0.5137	0.7630	0.6860
180	SB	0.1243	0.1057	0.2617	0.2307	0.4403	0.4093	0.6197	0.5900	0.7823	0.7570
	PB	0.1253	0.1253	0.2653	0.2653	0.4477	0.4477	0.6227	0.6227	0.7860	0.7860
	BCPB	0.1280	0.1283	0.2640	0.2640	0.4437	0.4457	0.6240	0.6243	0.7833	0.7823
	BT	0.1227	0.0827	0.2567	0.1883	0.4357	0.3520	0.6183	0.5353	0.7807	0.7083
190	SB	0.1350	0.1127	0.2657	0.2420	0.4510	0.4197	0.6477	0.6080	0.8107	0.7860
	PB	0.1360	0.1360	0.2720	0.2720	0.4550	0.4550	0.6510	0.6510	0.8123	0.8123
	BCPB	0.1337	0.1333	0.2707	0.2723	0.4553	0.4560	0.6470	0.6483	0.8097	0.8103
	BT	0.1313	0.0883	0.2627	0.2060	0.4460	0.3640	0.6417	0.5503	0.8087	0.7393
200	SB	0.1427	0.1240	0.2930	0.2657	0.4837	0.4527	0.6697	0.6403	0.8307	0.8043
	PB	0.1450	0.1450	0.2967	0.2967	0.4873	0.4873	0.6723	0.6723	0.8313	0.8313
	BCPB	0.1437	0.1423	0.2960	0.2970	0.4883	0.4897	0.6717	0.6727	0.8297	0.8307
	BT	0.1410	0.0997	0.2887	0.2210	0.4813	0.3970	0.6653	0.5973	0.8280	0.7653

	C_{pmk1}	1		1		1		1		1	
	C_{pmk2}	1.30		1.35		1.40		1.45		1.50	
n	diff / ratio	diff	ratio	diff	ratio	diff	ratio	diff	ratio	diff	ratio
10	SB	0.1447	0.0767	0.1787	0.0903	0.2023	0.1043	0.2300	0.1213	0.2623	0.1430
	PB	0.2123	0.2123	0.2443	0.2443	0.2860	0.2860	0.3130	0.3130	0.3487	0.3487
	BCPB	0.2133	0.2047	0.2390	0.2297	0.2790	0.2663	0.3067	0.2970	0.3447	0.3337
	BT	0.1220	0.0210	0.1380	0.0253	0.1617	0.0323	0.1897	0.0363	0.2110	0.0467
20	SB	0.2317	0.1603	0.2787	0.1900	0.3300	0.2293	0.3827	0.2747	0.4453	0.3243
	PB	0.2630	0.2630	0.3157	0.3157	0.3653	0.3653	0.4177	0.4177	0.4823	0.4823
	BCPB	0.2627	0.2613	0.3133	0.3100	0.3623	0.3607	0.4160	0.4123	0.4833	0.4767
	BT	0.2080	0.0683	0.2487	0.0827	0.3003	0.1060	0.3500	0.1343	0.4093	0.1710
30	SB	0.3043	0.2260	0.3673	0.2787	0.4467	0.3397	0.5257	0.4183	0.6027	0.4950
	PB	0.3230	0.3230	0.3970	0.3970	0.4743	0.4743	0.5497	0.5497	0.6237	0.6237
	BCPB	0.3197	0.3210	0.3997	0.4000	0.4760	0.4733	0.5500	0.5500	0.6243	0.6260
	BT	0.2810	0.1240	0.3443	0.1663	0.4197	0.2140	0.4987	0.2723	0.5787	0.3353
40	SB	0.3947	0.3103	0.4750	0.3943	0.5550	0.4700	0.6350	0.5547	0.7157	0.6387
	PB	0.4137	0.4137	0.4957	0.4957	0.5693	0.5693	0.6540	0.6540	0.7223	0.7223
	BCPB	0.4120	0.4133	0.4947	0.4957	0.5737	0.5757	0.6540	0.6530	0.7280	0.7280
	BT	0.3760	0.2060	0.4573	0.2693	0.5380	0.3437	0.6247	0.4207	0.7050	0.5047
50	SB	0.4513	0.3720	0.5413	0.4717	0.6297	0.5627	0.7183	0.6483	0.7867	0.7340
	PB	0.4670	0.4670	0.5550	0.5550	0.6433	0.6433	0.7313	0.7313	0.7917	0.7917
	BCPB	0.4660	0.4670	0.5563	0.5570	0.6457	0.6443	0.7300	0.7287	0.7930	0.7933
	BT	0.4293	0.2680	0.5237	0.3537	0.6167	0.4473	0.7037	0.5417	0.7820	0.6323
60	SB	0.5067	0.4480	0.6037	0.5440	0.6863	0.6343	0.7733	0.7173	0.8337	0.7937
	PB	0.5143	0.5143	0.6117	0.6117	0.6940	0.6940	0.7770	0.7770	0.8387	0.8387
	BCPB	0.5217	0.5227	0.6163	0.6170	0.6973	0.6970	0.7797	0.7790	0.8433	0.8443
	BT	0.4970	0.3493	0.5943	0.4480	0.6770	0.5443	0.7657	0.6340	0.8343	0.7237
70	SB	0.5663	0.5073	0.6643	0.6137	0.7580	0.7123	0.8353	0.7960	0.8910	0.8610
	PB	0.5733	0.5733	0.6707	0.6707	0.7670	0.7670	0.8387	0.8387	0.8947	0.8947
	BCPB	0.5773	0.5780	0.6760	0.6747	0.7707	0.7713	0.8400	0.8383	0.8957	0.8963
	BT	0.5560	0.4133	0.6553	0.5230	0.7550	0.6283	0.8313	0.7280	0.8900	0.8080

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n	C_{pmk1}	1		1		1		1		1	
	C_{pmk2}	1.30		1.35		1.40		1.45		1.50	
	diff / ratio	diff	ratio	diff	ratio	diff	ratio	diff	ratio	diff	ratio
80	SB	0.6103	0.5493	0.7163	0.6717	0.8107	0.7680	0.8800	0.8497	0.9220	0.9050
	PB	0.6200	0.6200	0.7223	0.7223	0.8147	0.8147	0.8807	0.8807	0.9233	0.9233
	BCPB	0.6197	0.6210	0.7270	0.7263	0.8147	0.8173	0.8820	0.8827	0.9257	0.9250
	BT	0.6047	0.4633	0.7123	0.5813	0.8043	0.7070	0.8750	0.7937	0.9210	0.8673
90	SB	0.6560	0.6083	0.7777	0.7320	0.8697	0.8383	0.9257	0.9030	0.9630	0.9503
	PB	0.6647	0.6647	0.7817	0.7817	0.8723	0.8723	0.9267	0.9267	0.9633	0.9633
	BCPB	0.6633	0.6663	0.7827	0.7823	0.8757	0.8747	0.9290	0.9297	0.9647	0.9650
	BT	0.6480	0.5243	0.7740	0.6453	0.8643	0.7710	0.9247	0.8683	0.9627	0.9260
100	SB	0.6917	0.6550	0.7963	0.7623	0.8707	0.8473	0.9233	0.9087	0.9613	0.9483
	PB	0.6967	0.6967	0.8030	0.8030	0.8750	0.8750	0.9253	0.9253	0.9620	0.9620
	BCPB	0.6953	0.6953	0.8057	0.8060	0.8793	0.8800	0.9260	0.9273	0.9620	0.9623
	BT	0.6873	0.5803	0.7960	0.7013	0.8690	0.8040	0.9213	0.8763	0.9593	0.9273
110	SB	0.7340	0.6953	0.8437	0.8067	0.9057	0.8890	0.9537	0.9400	0.9740	0.9697
	PB	0.7393	0.7393	0.8447	0.8447	0.9067	0.9067	0.9543	0.9543	0.9740	0.9740
	BCPB	0.7397	0.7427	0.8473	0.8493	0.9073	0.9073	0.9547	0.9550	0.9743	0.9743
	BT	0.7290	0.6240	0.8433	0.7537	0.9047	0.8570	0.9527	0.9137	0.9747	0.9590
120	SB	0.7687	0.7290	0.8657	0.8423	0.9360	0.9187	0.9660	0.9580	0.9847	0.9807
	PB	0.7707	0.7707	0.8690	0.8690	0.9363	0.9363	0.9660	0.9660	0.9857	0.9857
	BCPB	0.7740	0.7740	0.8703	0.8697	0.9393	0.9390	0.9687	0.9690	0.9860	0.9860
	BT	0.7660	0.6683	0.8613	0.7953	0.9360	0.8867	0.9657	0.9430	0.9850	0.9737
130	SB	0.7830	0.7493	0.8733	0.8533	0.9370	0.9243	0.9730	0.9660	0.9880	0.9867
	PB	0.7867	0.7867	0.8760	0.8760	0.9383	0.9383	0.9737	0.9737	0.9880	0.9880
	BCPB	0.7883	0.7900	0.8763	0.8767	0.9397	0.9397	0.9727	0.9730	0.9893	0.9893
	BT	0.7807	0.6940	0.8703	0.8137	0.9397	0.8947	0.9737	0.9540	0.9887	0.9810
140	SB	0.8080	0.7823	0.8947	0.8760	0.9517	0.9407	0.9790	0.9740	0.9957	0.9920
	PB	0.8117	0.8117	0.8973	0.8973	0.9527	0.9527	0.9793	0.9793	0.9953	0.9953
	BCPB	0.8117	0.8120	0.8993	0.9003	0.9527	0.9523	0.9807	0.9807	0.9957	0.9957
	BT	0.8047	0.7400	0.8943	0.8433	0.9517	0.9193	0.9780	0.9650	0.9963	0.9860

	C_{pmk1}	1		1		1		1		1	
	C_{pmk2}	1.30		1.35		1.40		1.45		1.50	
n	diff / ratio	diff	ratio	diff	ratio	diff	ratio	diff	ratio	diff	ratio
150	SB	0.8400	0.8093	0.9240	0.9083	0.9643	0.9587	0.9870	0.9833	0.9947	0.9940
	PB	0.8437	0.8437	0.9253	0.9253	0.9650	0.9650	0.9870	0.9870	0.9947	0.9947
	BCPB	0.8430	0.8433	0.9263	0.9270	0.9643	0.9650	0.9877	0.9873	0.9953	0.9953
	BT	0.8367	0.7647	0.9230	0.8747	0.9643	0.9483	0.9877	0.9757	0.9947	0.9920
160	SB	0.8597	0.8413	0.9363	0.9217	0.9753	0.9697	0.9927	0.9903	0.9990	0.9983
	PB	0.8593	0.8593	0.9380	0.9380	0.9757	0.9757	0.9930	0.9930	0.9990	0.9990
	BCPB	0.8593	0.8607	0.9390	0.9390	0.9757	0.9760	0.9933	0.9937	0.9990	0.9990
	BT	0.8567	0.8047	0.9330	0.8997	0.9757	0.9533	0.9940	0.9853	0.9990	0.9960
170	SB	0.8837	0.8623	0.9497	0.9417	0.9837	0.9787	0.9963	0.9937	0.9993	0.9993
	PB	0.8847	0.8847	0.9520	0.9520	0.9837	0.9837	0.9963	0.9963	0.9993	0.9993
	BCPB	0.8847	0.8847	0.9513	0.9517	0.9847	0.9847	0.9967	0.9963	0.9993	0.9993
	BT	0.8843	0.8267	0.9500	0.9210	0.9837	0.9683	0.9963	0.9913	0.9993	0.9990
180	SB	0.8897	0.8747	0.9483	0.9410	0.9820	0.9780	0.9947	0.9940	0.9993	0.9990
	PB	0.8897	0.8897	0.9490	0.9490	0.9827	0.9827	0.9950	0.9950	0.9993	0.9993
	BCPB	0.8873	0.8880	0.9493	0.9500	0.9837	0.9840	0.9953	0.9953	0.9993	0.9993
	BT	0.8900	0.8433	0.9493	0.9237	0.9823	0.9670	0.9953	0.9917	0.9993	0.9973
190	SB	0.9113	0.8970	0.9653	0.9580	0.9897	0.9857	0.9963	0.9953	0.9980	0.9977
	PB	0.9100	0.9100	0.9640	0.9640	0.9900	0.9900	0.9963	0.9963	0.9980	0.9980
	BCPB	0.9107	0.9110	0.9643	0.9647	0.9893	0.9890	0.9963	0.9963	0.9977	0.9977
	BT	0.9077	0.8740	0.9653	0.9457	0.9897	0.9793	0.9963	0.9943	0.9980	0.9977
200	SB	0.9250	0.9110	0.9717	0.9673	0.9903	0.9877	0.9957	0.9953	0.9987	0.9980
	PB	0.9247	0.9247	0.9727	0.9727	0.9903	0.9903	0.9960	0.9960	0.9983	0.9983
	BCPB	0.9270	0.9277	0.9717	0.9717	0.9910	0.9910	0.9960	0.9957	0.9983	0.9987
	BT	0.9247	0.8903	0.9720	0.9573	0.9907	0.9843	0.9960	0.9937	0.9987	0.9980

Note: Figures 20-39 show the selection power curves of the four bootstrap methods for the difference and ratio statistic for on-target process with $\mu_1 = \mu_2 = 0$, $C_{pmk1} = 1.00$, $C_{pmk2} = 1.05(0.05)1.50$ and sample size $n = 10(10)200$.
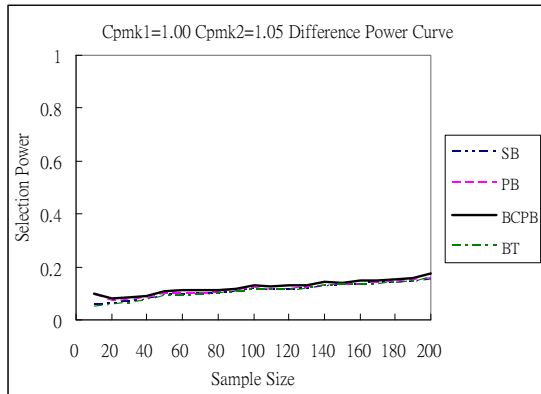
Figure 20. The difference statistic with sample size $n = 10(10)200$, $C_{pmk1} = 1$, $C_{pmk2} = 1.05$, $\mu_1 = \mu_2 = 0$.
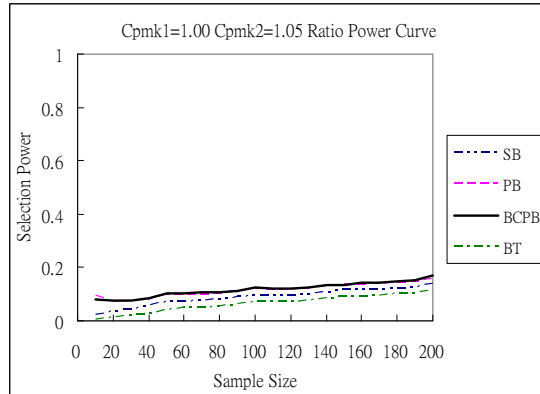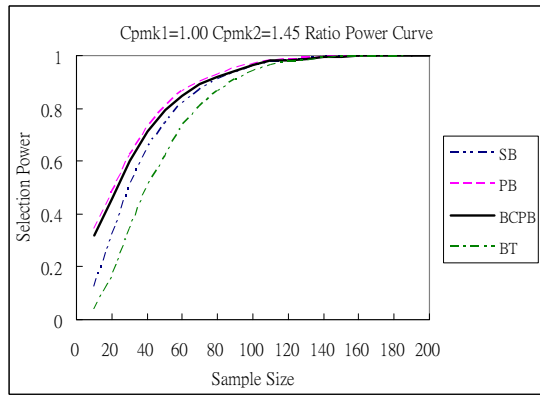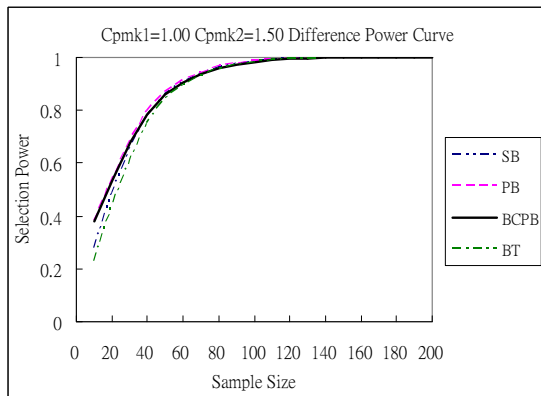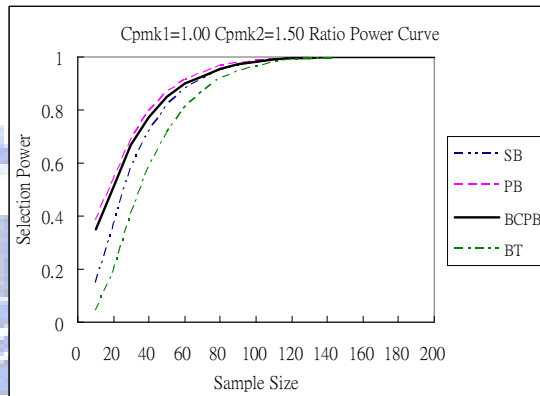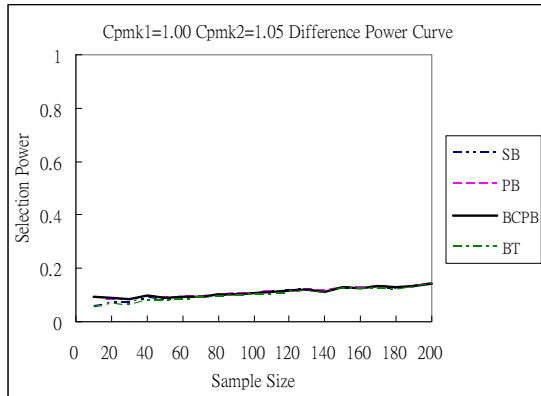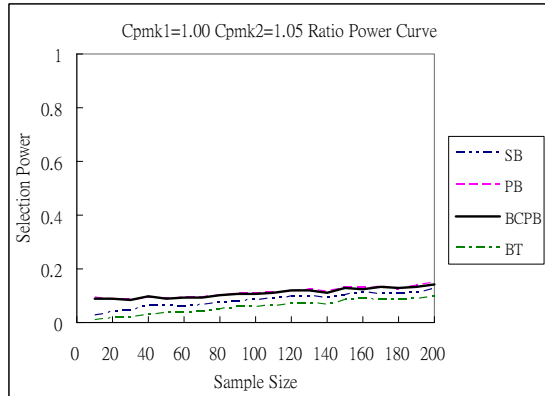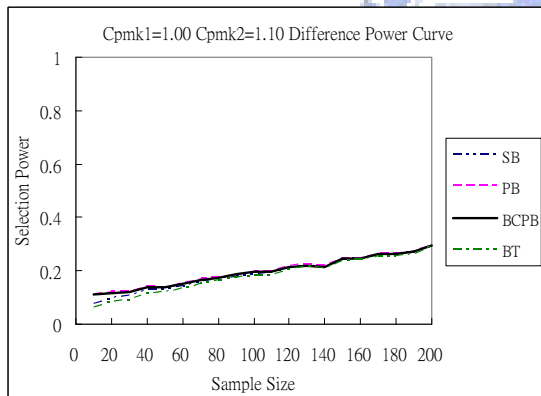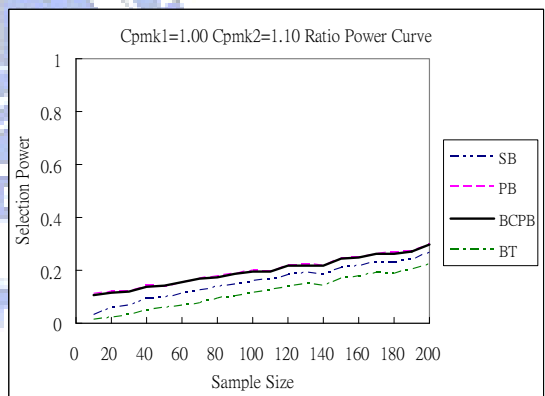

Figure 21. The ratio statistic with sample size $n = 10(10)200$, $C_{pmk1} = 1$, $C_{pmk2} = 1.05$, $\mu_1 = \mu_2 = 0$.
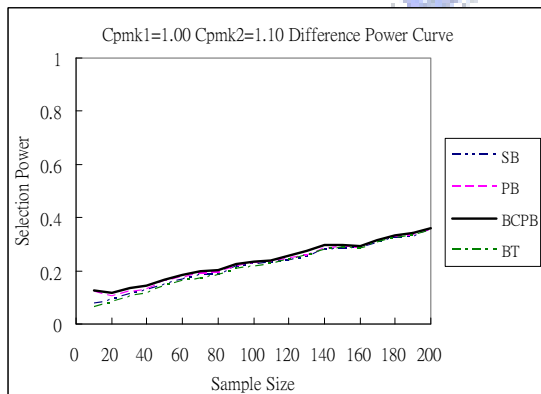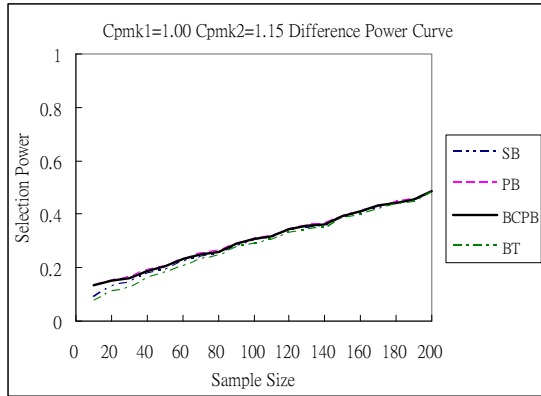

Figure 22. The difference statistic with sample size $n = 10(10)200$, $C_{pmk1} = 1$, $C_{pmk2} = 1.10$, $\mu_1 = \mu_2 = 0$.
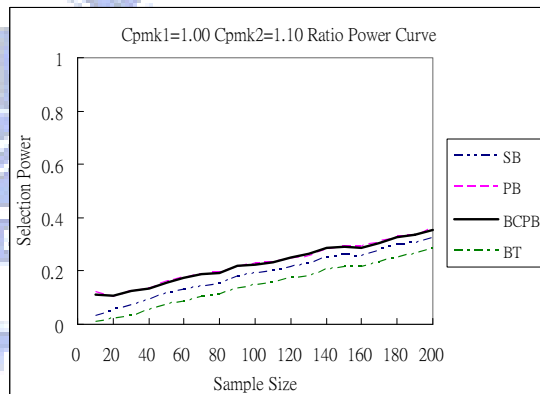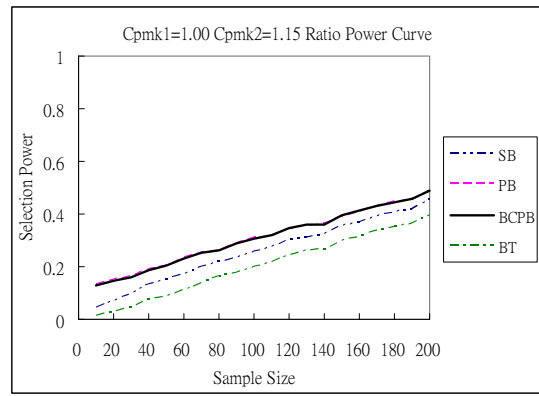

Figure 23. The ratio statistic with sample size $n = 10(10)200$, $C_{pmk1} = 1$, $C_{pmk2} = 1.10$, $\mu_1 = \mu_2 = 0$.
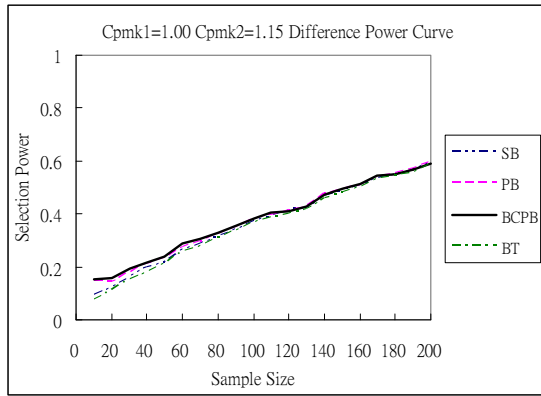
Figure 24. The difference statistic with sample size $n=10(10)200$, $C_{pmk1}=1$, $C_{pmk2}=1.15$, $\mu_1=\mu_2=0$.
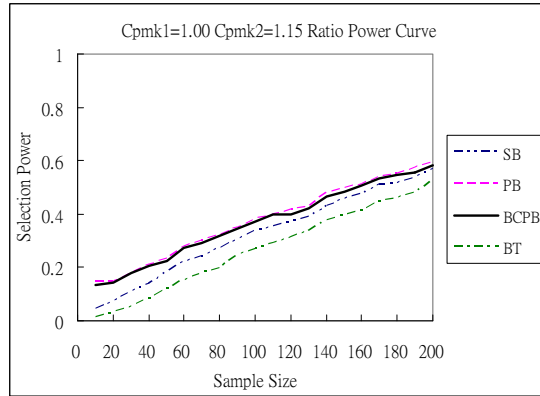
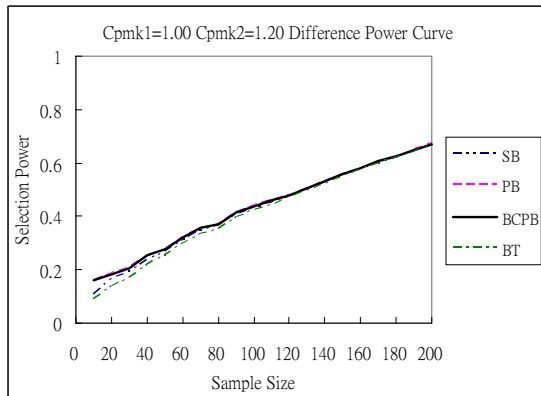Figure 25. The ratio statistic with sample size $n=10(10)200$, $C_{pmk1}=1$, $C_{pmk2}=1.15$, $\mu_1=\mu_2=0$.
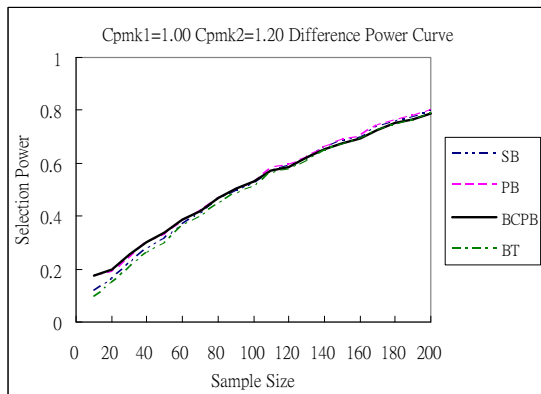
Figure 26. The difference statistic with sample size $n=10(10)200$, $C_{pmk1}=1$, $C_{pmk2}=1.20$, $\mu_1=\mu_2=0$.
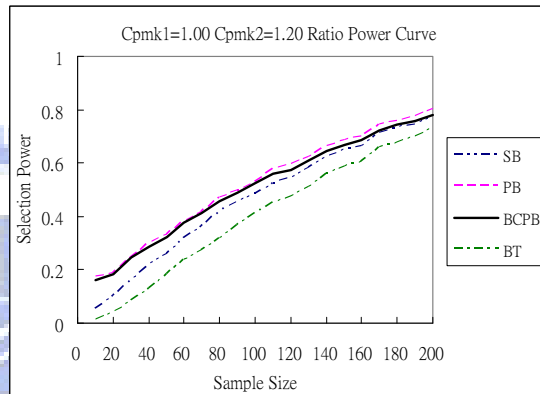
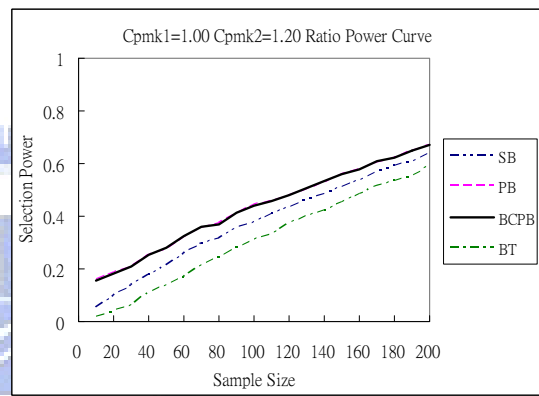
Figure 27. The ratio statistic with sample size $n=10(10)200$, $C_{pmk1}=1$, $C_{pmk2}=1.20$, $\mu_1=\mu_2=0$.
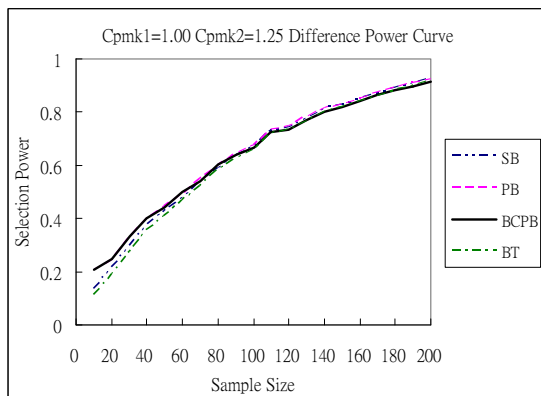
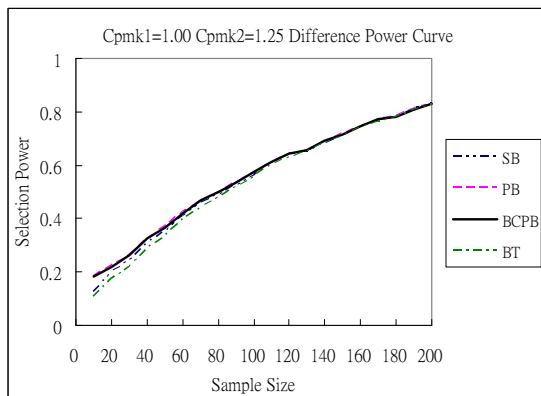Figure 28. The difference statistic with sample size $n=10(10)200$, $C_{pmk1}=1$, $C_{pmk2}=1.25$, $\mu_1=\mu_2=0$.
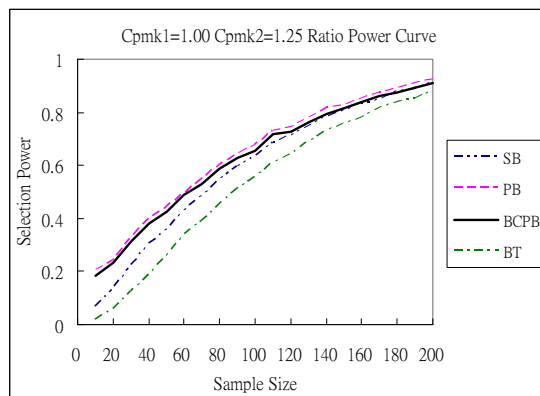
Figure 29. The ratio statistic with sample size $n=10(10)200$, $C_{pmk1}=1$, $C_{pmk2}=1.25$, $\mu_1=\mu_2=0$.
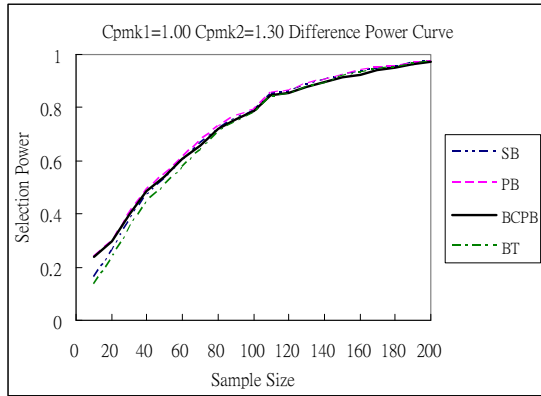
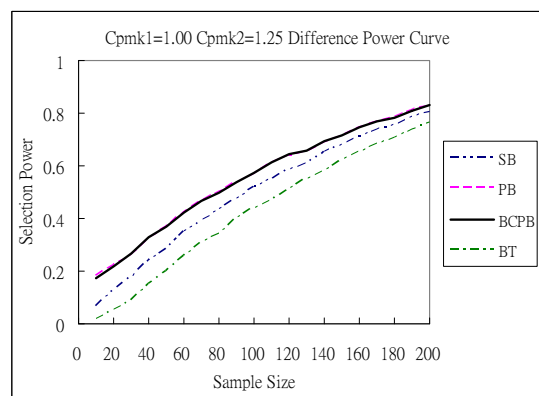Figure 30. The difference statistic with sample size $n=10(10)200$, $C_{pmk1}=1$, $C_{pmk2}=1.30$, $\mu_1=\mu_2=0$.
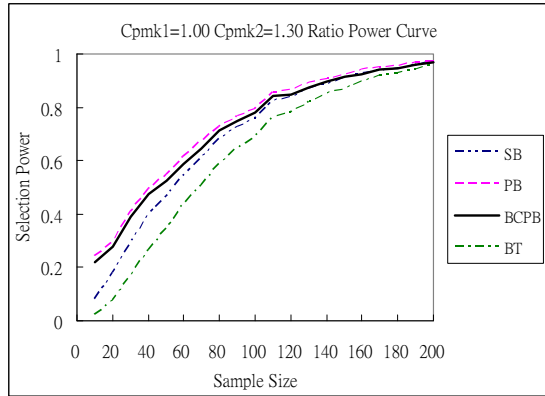
Figure 31. The ratio statistic with sample size $n=10(10)200$, $C_{pmk1}=1$, $C_{pmk2}=1.30$, $\mu_1=\mu_2=0$.
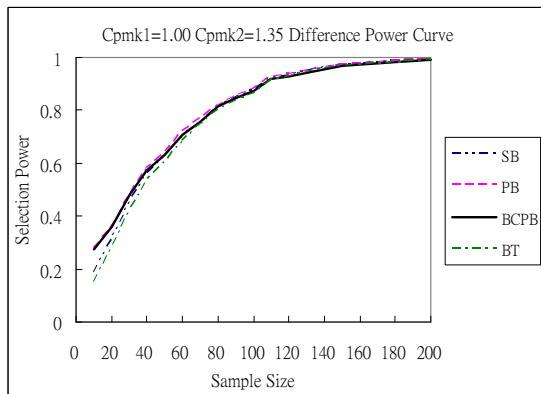
Figure 32. The difference statistic with sample size $n=10(10)200$, $C_{pmk1}=1$, $C_{pmk2}=1.35$, $\mu_1=\mu_2=0$.
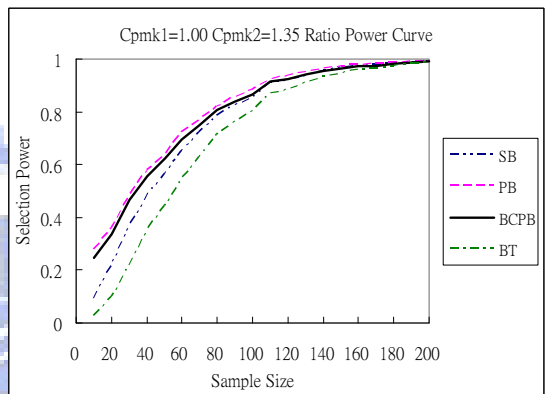
Figure 33. The ratio statistic with sample size $n=10(10)200$, $C_{pmk1}=1$, $C_{pmk2}=1.35$, $\mu_1=\mu_2=0$.
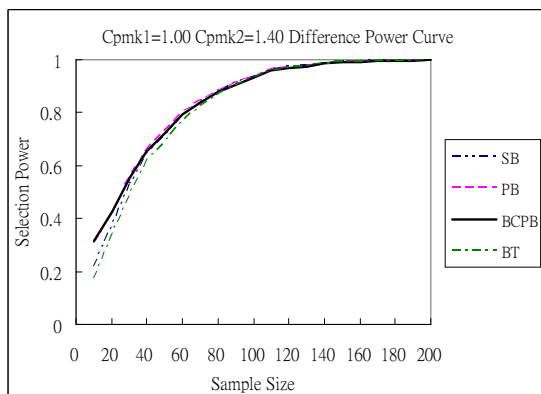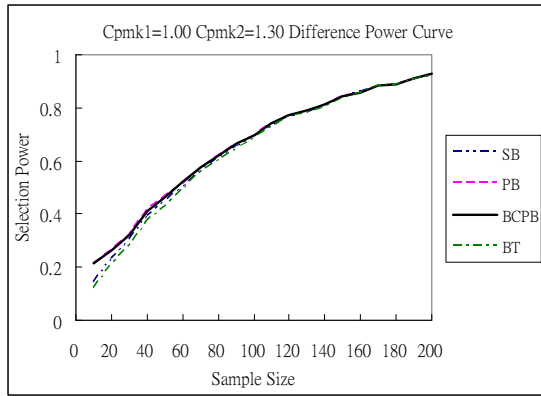

Figure 34. The difference statistic with sample size $n=10(10)200$, $C_{pmk1}=1$, $C_{pmk2}=1.40$, $\mu 1=\mu 2=0$.
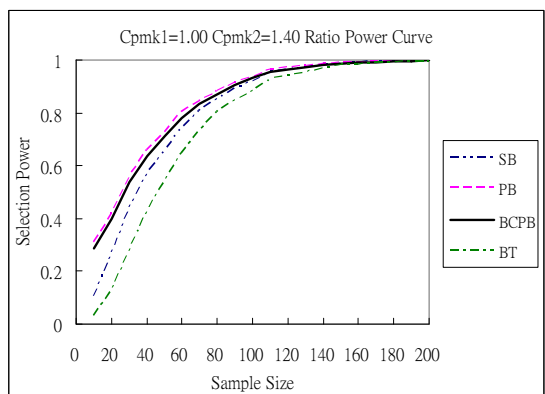
Figure 35. The ratio statistic with sample size $n=10(10)200$, $C_{pmk1}=1$, $C_{pmk2}=1.40$, $\mu 1=\mu 2=0$.
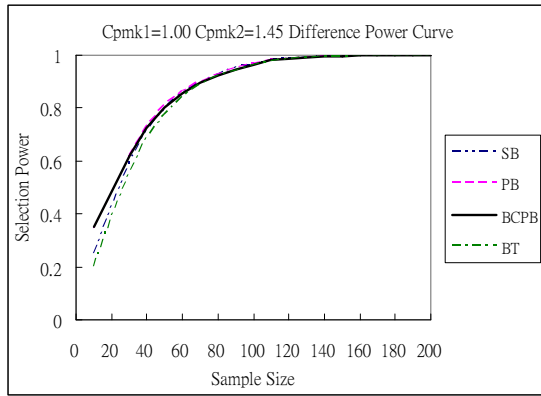
Figure 36. The difference statistic with sample size n=10(10)200, $C_{pmk1}=1$, $C_{pmk2}=1.45$, $\mu_1=\mu_2=0$.
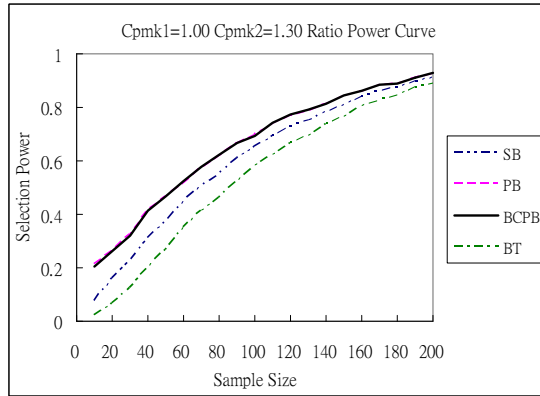

Figure 37. The ratio statistic with sample size $n=10(10)200$, $C_{pmk1}=1$, $C_{pmk2}=1.45$, $\mu_1=\mu_2=0$.
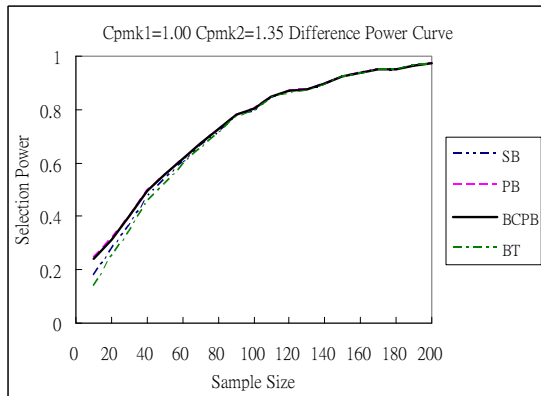

Figure 38. The difference statistic with sample size n=10(10)200, $C_{pmk1}=1$, $C_{pmk2}=1.50$, $\mu_1=\mu_2=0$.

Figure 39. The ratio statistic with sample size $n=10(10)200$, $C_{pmk1}=1$, $C_{pmk2}=1.50$, $\mu_1=\mu_2=0$.

Note: Figures 40-59 show the selection power curves of the four bootstrap methods for the difference and ratio statistic for off-target process with $\mu_1 = \mu_2 = 0.4$, $C_{pmk1} = 1.00$, $C_{pmk2} = 1.05(0.05)1.50$ and sample size $n = 10(10)200$.

Figure 40. The difference statistic with sample size $n = 10(10)200$, $C_{pmk1} = 1$, $C_{pmk2} = 1.05$, $\mu_1 = \mu_2 = 0.4$.

Figure 41. The ratio statistic with sample size $n = 10(10)200$, $C_{pmk1} = 1$, $C_{pmk2} = 1.05$, $\mu_1 = \mu_2 = 0.4$.

Figure 42. The difference statistic with sample size $n=10(10)200$, $C_{pmk1} = 1$, $C_{pmk2} = 1.10$, $\mu_1 = \mu_2 = 0.4$.

Figure 43. The ratio statistic with sample size $n = 10(10)200$, $C_{pmk1} = 1$, $C_{pmk2} = 1.10$, $\mu_1 = \mu_2 = 0.4$.

Figure 44. The difference statistic with sample size n=10(10)200, $C_{pmk1}=1$, $C_{pmk2}=1.15$, $\mu_1=\mu_2=0.4$.
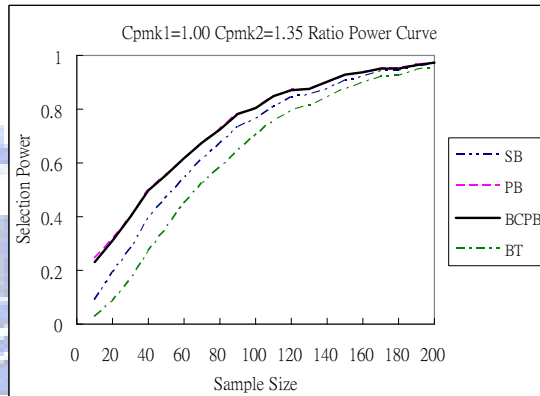

Figure 45. The ratio statistic with sample size n=10(10)200, $C_{pmk1}=1$, $C_{pmk2}=1.15$, $\mu_1=\mu_2=0.4$.
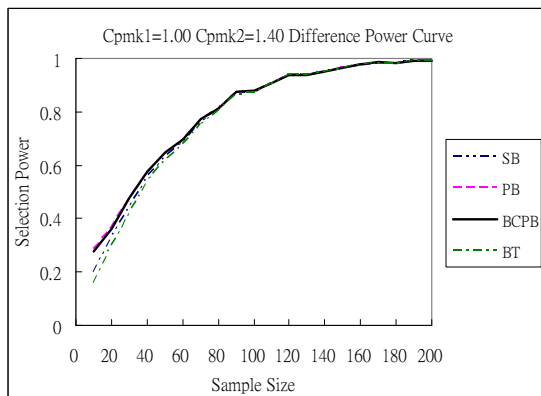

Figure 46. The difference statistic with sample size n=10(10)200, $C_{pmk1}=1$, $C_{pmk2}=1.20$, $\mu_1=\mu_2=0.4$.
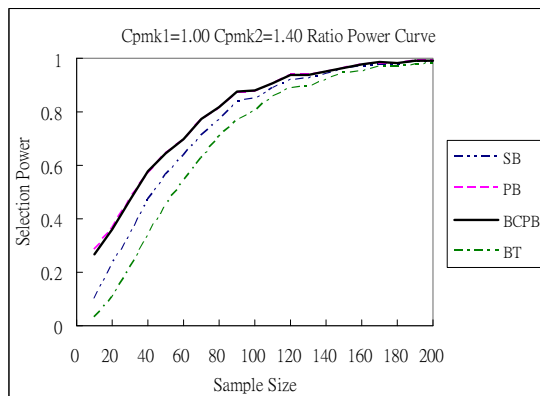

Figure 47. The ratio statistic with sample size n=10(10)200, $C_{pmk1}=1$, $C_{pmk2}=1.20$, $\mu_1=\mu_2=0.4$.

Figure 48. The difference statistic with sample size n=10(10)200, $C_{pmk1}=1$, $C_{pmk2}=1.25$, $\mu_1=\mu_2=0.4$.

Figure 49. The ratio statistic with sample size n=10(10)200, $C_{pmk1}=1$, $C_{pmk2}=1.25$, $\mu_1=\mu_2=0.4$.
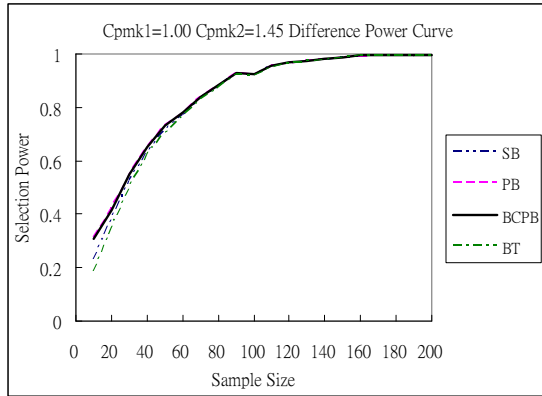
Figure 50. The difference statistic with sample size $n=10(10)200$, $C_{pmk1}=1$, $C_{pmk2}=1.30$, $\mu_1=\mu_2=0.4$.

Figure 51. The ratio statistic with sample size $n=10(10)200$, $C_{pmk1}=1$, $C_{pmk2}=1.30$, $\mu_1=\mu_2=0.4$.

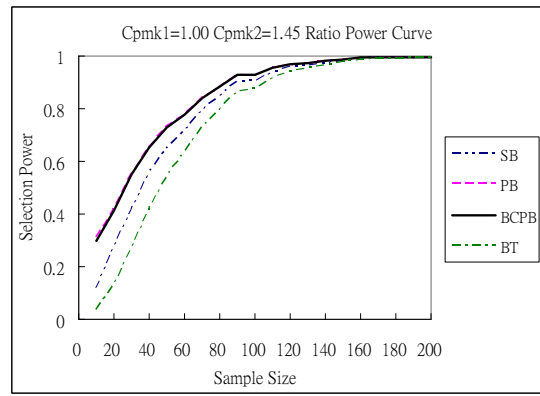Figure 52. The difference statistic with sample size $n=10(10)200$, $C_{pmk1}=1$, $C_{pmk2}=1.35$, $\mu_1=\mu_2=0.4$.

Figure 53. The ratio statistic with sample size $n=10(10)200$, $C_{pmk1}=1$, $C_{pmk2}=1.35$, $\mu_1=\mu_2=0.4$.
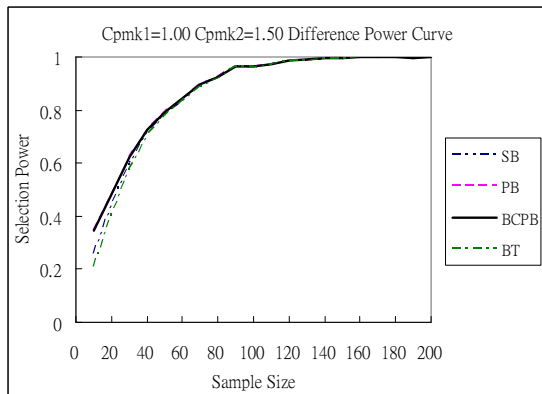

Figure 54. The difference statistic with sample size $n=10(10)200$, $C_{pmk1}=1$, $C_{pmk2}=1.40$, $\mu_1=\mu_2=0.4$.

Figure 55. The ratio statistic with sample size $n=10(10)200$, $C_{pmk1}=1$, $C_{pmk2}=1.40$, $\mu_1=\mu_2=0.4$.

Figure 56. The difference statistic with sample size $n=10(10)200$, $C_{pmk1}=1$, $C_{pmk2}=1.45$, $\mu_1=\mu_2=0.4$.

Figure 57. The ratio statistic with sample size $n=10(10)200$, $C_{pmk1}=1$, $C_{pmk2}=1.45$, $\mu_1=\mu_2=0.4$.

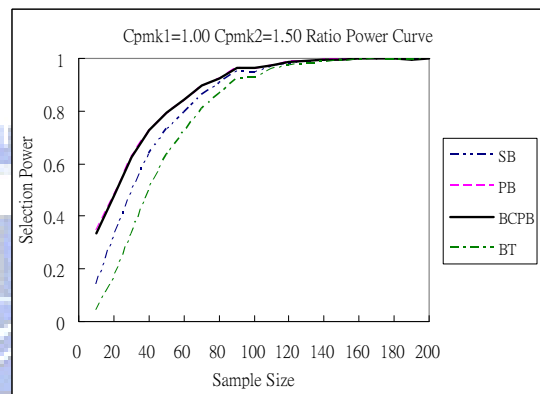Figure 58. The difference statistic with sample size $n=10(10)200$, $C_{pmk1}=1$, $C_{pmk2}=1.50$, $\mu_1=\mu_2=0.4$.

Figure 59. The ratio statistic with sample size $n=10(10)200$, $C_{pmk1}=1$, $C_{pmk2}=1.50$, $\mu_1=\mu_2=0.4$.