

Additional file 4

Table A4 - Results of scenarios 15 and 16

True HR and e^{ψ}	Method	Mean estimate	Mean SE	SE of mean	95% Confidence interval		Bias	MSE	Coverage (%)	Successful estimation (%)
					Lower	Upper				
0.9 & 1.23	Hazard ratio methods									
	ITT	0.9332	0.0983	0.0980	0.7591	1.1472	0.0332	0.0107	94.2	100.0
	PP - Excluding switchers	0.9584	0.1300	0.1287	0.7347	1.2503	0.0584	0.0200	93.8	100.0
	PP - Censor at switch	1.7377	0.2366	0.2300	1.3308	2.2692	0.8377	0.7546	0.0	100.0
	Time-dependent covariate	2.3775	0.3061	0.3018	1.8473	3.0602	1.4775	2.2741	0.0	100.0
	Law and Kaldor	0.9434	0.1317	0.1349	0.7175	1.2404	0.0434	0.0201	93.3	100.0
	Loeys and Goethebeur	0.8628	-	0.2139	0.5160	1.4247	-0.0372	0.0471	95.0	100.0
	AFT methods									
	ITT	1.1903	0.2551	0.2605	0.7823	1.8121	-0.0442	0.0698	94.1	100.0
	PP - Excluding switchers	1.1522	0.1300	0.3253	0.6736	1.9734	-0.0824	0.1126	94.0	100.0
	PP - Censor at switch	0.3582	0.0974	0.0986	0.2103	0.6109	-0.8764	0.7777	0.0	100.0
	Robins and Tsiatis - Logrank	1.2915	-	0.4067	0.6867	2.3459	0.0569	0.1686	95.0	100.0
	Robins and Tsiatis - Cox	1.2895	-	0.3997	0.6793	26.1962	0.0550	0.1628	95.5	91.4
	Robins and Tsiatis - Exponential	1.3123	-	0.3846	0.9009	2.1561	0.0777	0.1539	89.0	99.5
	Robins and Tsiatis - Weibull	1.2934	-	0.4038	0.7018	2.4303	0.0588	0.1665	95.0	99.6
	Branson and Whitehead	1.2833	0.2754	0.3688	0.8428	1.9549	0.0487	0.1384	87.4	100.0
	Walker et al	3.2100	1.2199	1.1532	1.5455	12.4920	1.9754	5.2321	33.7	98.5
0.7 & 2.04	Hazard ratio methods									
	ITT	0.7935	0.0873	0.0918	0.6395	0.9846	0.0935	0.0172	79.4	100.0
	PP - Excluding switchers	0.7567	0.1049	0.1069	0.5766	0.9930	0.0567	0.0146	91.7	100.0
	PP - Censor at switch	1.3605	0.1898	0.1917	1.0351	1.7884	0.6605	0.4730	0.0	100.0
	Time-dependent covariate	1.8960	0.2483	0.2504	1.4667	2.4510	1.1960	1.4930	0.0	100.0
	Law and Kaldor	0.7927	0.1175	0.1185	0.5929	1.0601	0.0927	0.0226	87.5	100.0
	Loeys and Goethebeur	0.5883	-	0.1712	0.3185	0.9983	-0.1117	0.0418	88.7	99.6
	AFT methods									
	ITT	1.6640	0.3733	0.3939	1.0723	2.5835	-0.3769	0.2972	81.2	100.0
	PP - Excluding switchers	1.8641	0.5229	0.5431	1.0765	3.2326	-0.1767	0.3262	91.5	100.0
	PP - Censor at switch	0.5829	0.1584	0.1626	0.3425	0.9935	-1.4579	2.1520	0.0	100.0
	Robins and Tsiatis - Logrank	2.1427	-	0.7352	1.1205	4.0697	0.1019	0.5510	93.9	100.0
	Robins and Tsiatis - Cox	2.4803	-	9.8483	1.2768	54.9580	0.4394	97.1822	94.3	86.6
	Robins and Tsiatis - Exponential	2.1439	-	0.7441	1.2881	3.8447	0.1031	0.5644	86.9	99.8
	Robins and Tsiatis - Weibull	2.1432	-	0.7368	1.1272	4.2830	0.1023	0.5534	94.1	99.8
	Branson and Whitehead	2.0437	0.4625	0.6392	1.3119	3.1855	0.0029	0.4086	85.5	100.0
	Walker et al	4.2789	1.7206	1.1840	1.9790	12.4920	2.2380	6.4107	49.9	56.1