

# Supplementary Material: **penPHcure** package

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January 2021

## Simulation results

				Incidence				Latency			
cens	cure	N	Method	MEE	MREE	C-0's	IC-0's	MEE	MREE	C-0's	IC-0's
0.4	0.3	250	FULL	0.0080	1	0	0	0.0035	1	0	0
			ORACLE	0.0042	0.53	4	0	0.0028	0.79	4	0
			SCAD	0.0076	0.96	3.74	0.29	0.0031	0.87	3.64	0
			COX	-	-	-	-	0.0573	18.21	4	0
		500	FULL	0.0038	1	0	0	0.0017	1	0	0
			ORACLE	0.0020	0.53	4	0	0.0014	0.80	4	0
			SCAD	0.0024	0.59	3.88	0.01	0.0014	0.83	3.79	0
			COX	-	-	-	-	0.0555	35.73	4	0
		1000	FULL	0.0019	1	0	0	0.0008	1	0	0
			ORACLE	0.0010	0.53	4	0	0.0007	0.79	4	0
			SCAD	0.0011	0.55	3.95	0	0.0007	0.80	3.93	0
			COX	-	-	-	-	0.0544	70.82	4	0
0.4	0.2	250	FULL	0.0092	1	0	0	0.0037	1	0	0
			ORACLE	0.0049	0.53	4	0	0.0029	0.79	4	0
			SCAD	0.0098	1.16	3.71	0.66	0.0031	0.84	3.77	0
			COX	-	-	-	-	0.0243	7.19	4	0
		500	FULL	0.0045	1	0	0	0.0018	1	0	0
			ORACLE	0.0024	0.54	4	0	0.0015	0.80	4	0
			SCAD	0.0036	0.77	3.82	0.14	0.0015	0.82	3.89	0
			COX	-	-	-	-	0.0228	13.74	4	0
		1000	FULL	0.0022	1	0	0	0.0009	1	0	0
			ORACLE	0.0012	0.54	4	0	0.0007	0.80	4	0
			SCAD	0.0013	0.58	3.93	0	0.0007	0.81	3.97	0
			COX	-	-	-	-	0.0220	27.65	4	0
0.6	0.45	250	FULL	0.0099	1	0	0	0.0044	1	0	0
			ORACLE	0.0052	0.53	4	0	0.0034	0.77	4	0
			SCAD	0.0099	0.98	3.73	0.36	0.0041	0.94	3.67	0.03
			COX	-	-	-	-	0.1033	26.08	4	0
		500	FULL	0.0047	1	0	0	0.0022	1	0	0
			ORACLE	0.0025	0.52	4	0	0.0017	0.79	4	0
			SCAD	0.0031	0.6	3.88	0.03	0.0019	0.84	3.76	0
			COX	-	-	-	-	0.1022	51.13	4	0
		1000	FULL	0.0024	1	0	0	0.0011	1	0	0
			ORACLE	0.0013	0.53	4	0	0.0008	0.78	4	0
			SCAD	0.0013	0.55	3.96	0	0.0008	0.80	3.86	0
			COX	-	-	-	-	0.1020	108.33	4	0
0.6	0.3	250	FULL	0.015	1	0	0	0.0046	1	0	0
			ORACLE	0.0078	0.52	4	0	0.0036	0.77	4	0
			SCAD	0.0167	1.19	3.68	0.82	0.0043	0.92	3.7	0.03
			COX	-	-	-	-	0.0353	8.72	4	0
		500	FULL	0.0065	1	0	0	0.0022	1	0	0
			ORACLE	0.0035	0.54	4	0	0.0017	0.78	4	0
			SCAD	0.0058	0.85	3.8	0.22	0.0018	0.82	3.89	0
			COX	-	-	-	-	0.0346	17.42	4	0
		1000	FULL	0.0033	1	0	0	0.0011	1	0	0

			ORACLE	0.0017	0.54	4	0	0.0008	0.78	4	0
			SCAD	0.002	0.58	3.9	0	0.0009	0.79	3.96	0
			COX	-	-	-	-	0.034	34.17	4	0
0.8	0.6	250	FULL	0.0165	1	0	0	0.0082	1	0	0
			ORACLE	0.0083	0.52	4	0	0.0058	0.73	4	0
			SCAD	0.0192	1.28	3.74	0.87	0.0082	1.04	3.69	0.21
			COX	-	-	-	-	0.1158	16.87	4	0
		500	FULL	0.0077	1	0	0	0.0038	1	0	0
			ORACLE	0.0042	0.55	4	0	0.0029	0.76	4	0
			SCAD	0.0081	1.03	3.85	0.27	0.0036	0.96	3.78	0.06
			COX	-	-	-	-	0.1173	34.85	4	0
		1000	FULL	0.0039	1	0	0	0.0018	1	0	0
			ORACLE	0.002	0.54	4	0	0.0014	0.77	4	0
			SCAD	0.0027	0.7	3.93	0.02	0.0016	0.87	3.88	0.02
			COX	-	-	-	-	0.1199	75.21	4	0
0.8	0.4	250	FULL	0.0358	1	0	0	0.0069	1	0	0
			ORACLE	0.0163	0.48	4	0	0.0050	0.74	4	0
			SCAD	0.0374	1.24	3.63	1.34	0.0070	1.06	3.73	0.18
			COX	-	-	-	-	0.0309	5.13	4	0
		500	FULL	0.014	1	0	0	0.0034	1	0	0
			ORACLE	0.0073	0.54	4	0	0.0026	0.76	4	0
			SCAD	0.0158	1.28	3.76	0.72	0.0031	0.92	3.87	0.02
			COX	-	-	-	-	0.0314	10.40	4	0
		1000	FULL	0.0063	1	0	0	0.0016	1	0	0
			ORACLE	0.0032	0.52	4	0	0.0012	0.76	4	0
			SCAD	0.0049	0.72	3.85	0.13	0.0013	0.78	3.94	0
			COX	-	-	-	-	0.0313	21.27	4	0

Results of the simulations. cens, average censoring percentage; cure, average fraction of subjects immune to the event; MEE, mean estimation error; MREE, mean relative estimation error (with respect to the FULL method); C-0's, average number of correct zeros; IC-0's, average number of incorrect zeros.