simulation to study strategies to handle small strata

Wei Zou

2023-12-21 19:59:13

code is modified from C:/Users/zouw2/aPDL1/impower010/natera/programs/sim_collapsibility4_test_strata

prevalence 0.5 , prognostic HR .63

```
## [1] "finding 100 input files when looking for r1"
## [1] "modification interval: 2454 min"
## [1] "will add file name to the returned data"
```

var	n	mean	sd	min	25%	50%	75%	max
n	2000	120.000	0.000	120.000	120.000	120.000	120.000	120.000
nevent	2000	74.454	5.172	58.000	71.000	74.000	78.000	92.000
p_s	2000	0.382	0.301	0.000	0.113	0.322	0.619	1.000
delta_p	2000	0.004	0.067	-0.331	-0.022	0.001	0.028	0.386
O-E_M2	2000	2.166	3.093	-9.329	0.027	2.185	4.308	13.076
O-E_M1	2000	1.784	2.784	-7.244	-0.101	1.828	3.643	10.848

prevalence 0.1 , prognostic HR .63

```
## [1] "finding 100 input files when looking for r1"
## [1] "modification interval: 1 min"
## [1] "will add file name to the returned data"
```

var	n	mean	sd	min	25%	50%	75%	max
n	2000	120.000	0.000	120.000	120.000	120.000	120.000	120.000
nevent	2000	82.581	5.039	65.000	79.000	83.000	86.000	99.000
p_s	2000	0.371	0.304	0.000	0.093	0.299	0.613	0.999
delta_p	2000	0.000	0.048	-0.366	-0.016	0.000	0.018	0.221
O-E_M2	2000	4.107	4.255	-10.150	1.184	4.154	6.953	22.443
O-E_M1	2000	0.315	1.235	-3.895	-0.538	0.317	1.108	3.919

prevalence 0.5 , prognostic HR .4

```
## [1] "finding 100 input files when looking for r1"
## [1] "modification interval: 0.9 min"
## [1] "will add file name to the returned data"
```

var	n	mean	sd	min	25%	50%	75%	max
n	2000	120.000	0.000	120.000	120.000	120.000	120.000	120.000
nevent	2000	70.694	4.977	55.000	67.000	71.000	74.000	91.000
p_s	2000	0.387	0.299	0.000	0.108	0.336	0.629	0.999
delta_p	2000	0.021	0.110	-0.476	-0.029	0.013	0.071	0.577
O-E_M2	2000	2.277	3.158	-9.639	0.081	2.356	4.461	12.735
O-E_M1	2000	1.450	2.476	-6.445	-0.260	1.512	3.162	10.858

prevalence 0.1 , prognostic HR .4

```
## [1] "finding 100 input files when looking for r1"
## [1] "modification interval: 1.9 min"
## [1] "will add file name to the returned data"
```

var	n	mean	sd	min	25%	50%	75%	max
n	2000	120.000	0.000	120.000	120.000	120.000	120.000	120.000
nevent	2000	86.063	4.876	68.000	83.000	86.000	89.000	100.000
p_s	2000	0.365	0.302	0.000	0.092	0.287	0.605	0.999
delta_p	2000	0.009	0.066	-0.325	-0.017	0.005	0.038	0.307
O-E_M2	2000	4.381	4.374	-11.642	1.431	4.395	7.338	21.854
O-E_M1	2000	0.252	1.107	-3.485	-0.505	0.207	0.977	3.919