Composite Endpoint Analysis Report

Missing Data Matters

2017-08-12

Contents

Data Summary

```
##       AGE              TRT              SURV             Y1
##  Min.   :18.06   Min.   :0.0000   Min.   :  1.0   Min.   :12.0
##  1st Qu.:55.52   1st Qu.:0.0000   1st Qu.: 14.5   1st Qu.:35.0
##  Median :66.23   Median :0.0000   Median :365.0   Median :39.5
##  Mean   :63.72   Mean   :0.4973   Mean   :519.5   Mean   :38.7
##  3rd Qu.:75.39   3rd Qu.:1.0000   3rd Qu.:999.0   3rd Qu.:45.0
##  Max.   :90.29   Max.   :1.0000   Max.   :999.0   Max.   :54.0
##                                                   NA's   :111
##       Y2
##  Min.   :17.00
##  1st Qu.:37.00
##  Median :41.00
##  Mean   :40.86
##  3rd Qu.:47.00
##  Max.   :53.00
##  NA's   :136
```

Analysis Summary

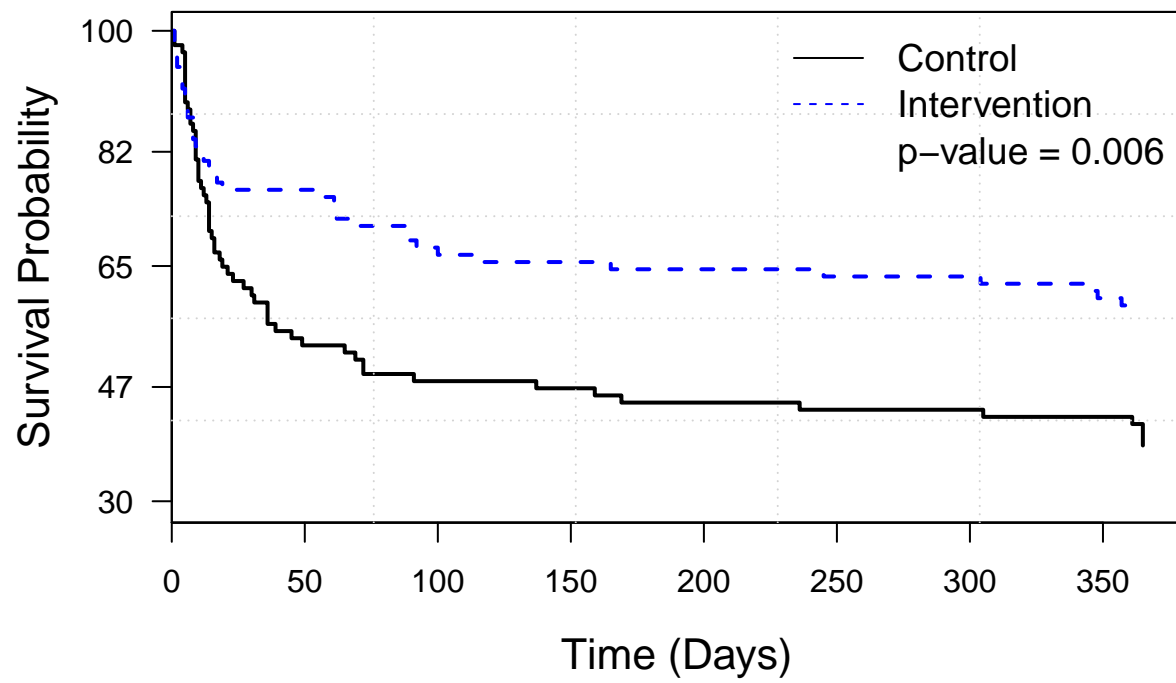The basic settings of the analysis are as follows:

```
## There are 187 observations of 5 variables in the data.
## Detailed specifications are as follows:
##      Treatment: TRT
##      Survival time: TRT
##      Study duration: 365
##      Outcomes (ordered chronically): Y1 Y2
##      Endpoint (in R formula): Y2
##      Covariates: AGE
##      Biological boundary of the outcomes: 0 100
## See summary information for missingness frequencies.
```

Missingness Summary

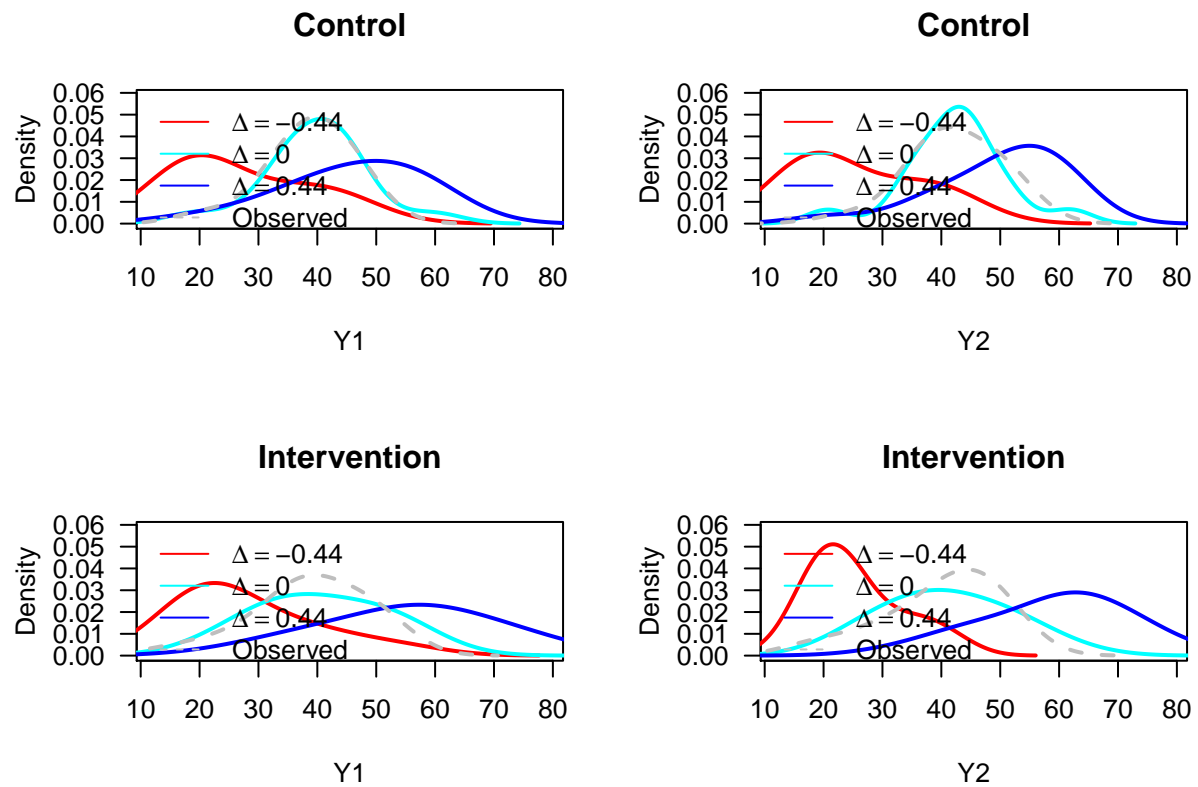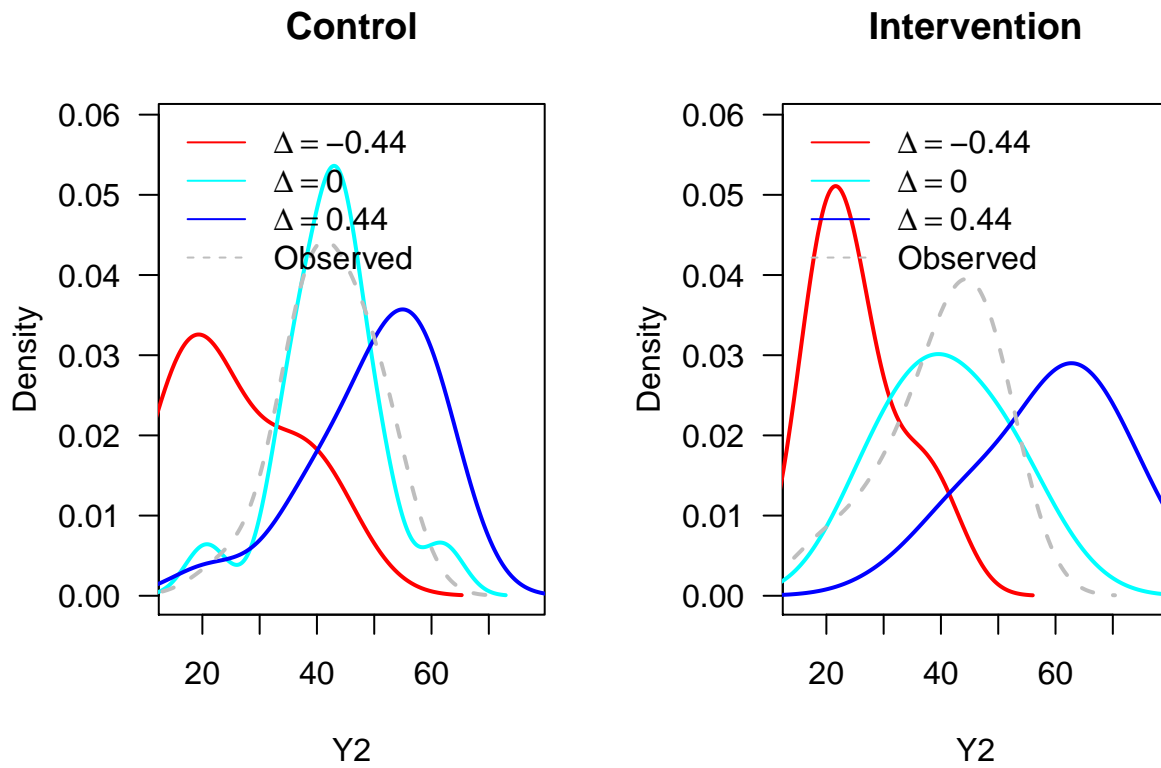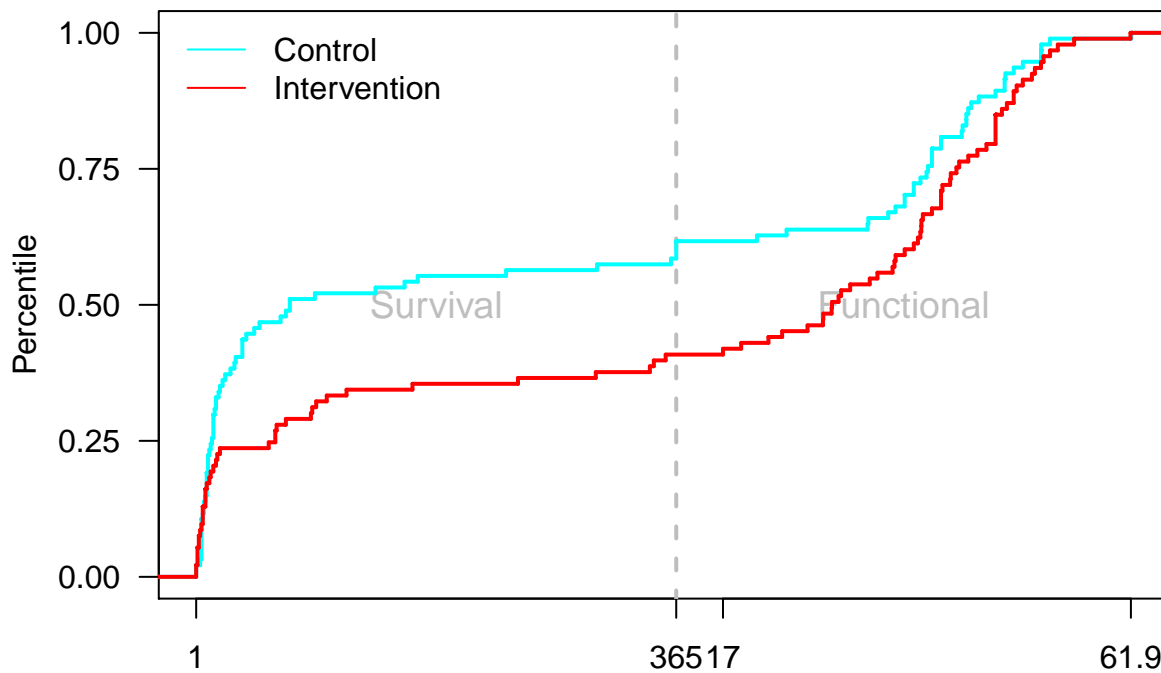|	Y1	Y2	Control	Intervention
Deaths on study			58 (62%)	38 (41%)
S=1	Observed	Observed	18 (19%)	32 (34%)
S=2	Observed	Missing	8 (9%)	8 (9%)
S=3	Missing	Observed	1 (1%)	0 (0%)
S=4	Missing	Missing	9 (10%)	15 (16%)
Total			94	93

Survival

Survival Curves

Imputation Result

Imputed Outcomes

Control

Control

Intervention

Intervention

Imputed Endpoint

Control

Intervention

Composite Quantile

Bootstrap Results

Hypothesis Testing

	Delta0	Delta1	Theta	SD	PValue
1	-0.44	-0.44	-0.20	0.06	0.00
2	0.00	-0.44	-0.11	0.05	0.04
3	0.44	-0.44	-0.07	0.05	0.11
4	-0.44	0.00	-0.26	0.05	0.00
5	0.00	0.00	-0.18	0.04	0.00
6	0.44	0.00	-0.13	0.04	0.00
7	-0.44	0.44	-0.32	0.03	0.00
8	0.00	0.44	-0.26	0.02	0.00
9	0.44	0.44	-0.22	0.01	0.00

Median

	Delta	TRT	Q	QuantY	QuantSurv	BSQ2.5	BSQ97.5	BSQ2.5_Surv	BSQ97.5_Surv
1	-0.44	0.00	0.50		72.00	49.00	159.00	1.00	1.00
2	-0.44	1.00	0.50	20.01		17.00	22.66	0.00	0.00
3	0.00	0.00	0.50		72.00	49.00	159.00	1.00	1.00
4	0.00	1.00	0.50	29.00		19.00	36.00	0.00	0.00
5	0.44	0.00	0.50		72.00	49.00	159.00	1.00	1.00
6	0.44	1.00	0.50	34.00		22.00	38.00	0.00	0.00

Contour plot