# Composite Endpoint Analysis Report

# Missing Data Matters 2016-07-04

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#### **Data Summary**

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

#### **Analysis Summary**

The basic settings of the analysis are as follows:

```
## $endfml
## [1] "Y2"
##
## $duration
## [1] 365
##
## $bounds
## [1]
         0 100
##
## $mindiff
## [1] 0 0
##
## $trt
## [1] "TRT"
##
## $surv
## [1] "SURV"
##
## $outcome
## [1] "Y1" "Y2"
##
## $y0
## NULL
##
## $cov
## [1] "AGE"
##
## $endp
## [1] "Y2"
```

```
##
## $unitTime
## [1] "Days"
##
## $parsed.endfml
## expression(with(d.frame, { Y2 }))
```

The imputation and bootstrap analysis settings are

Iterations: 100Thinning: 1

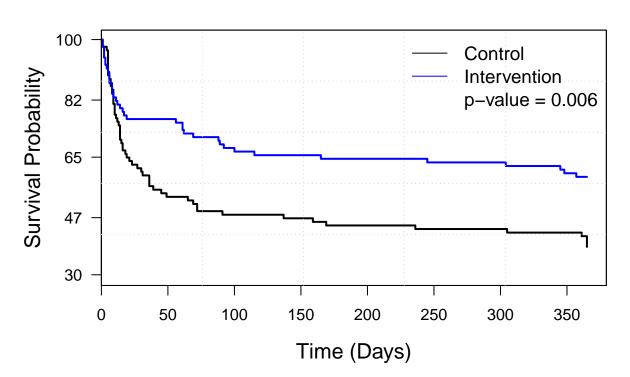
• Scale of random walk MH: 1

#### 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

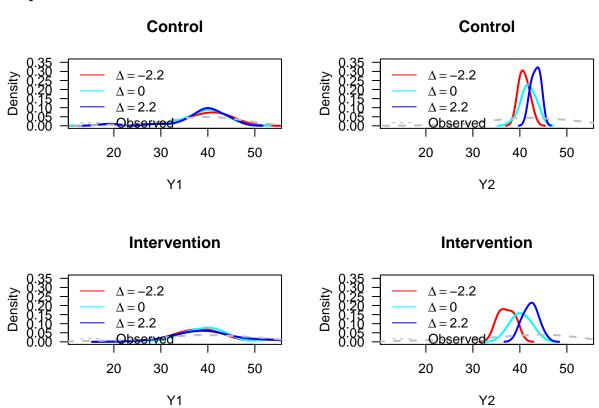
#### Survival

#### **Survival Curves**



## Imputation Result

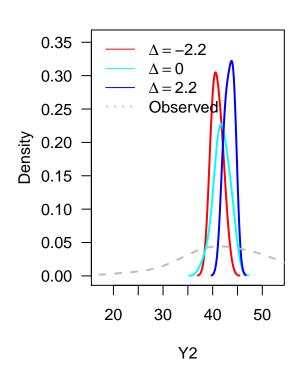
#### Imputed Outcomes

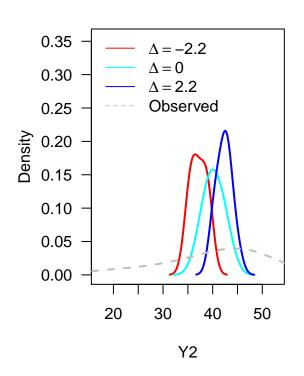


#### Imputed Endpoint

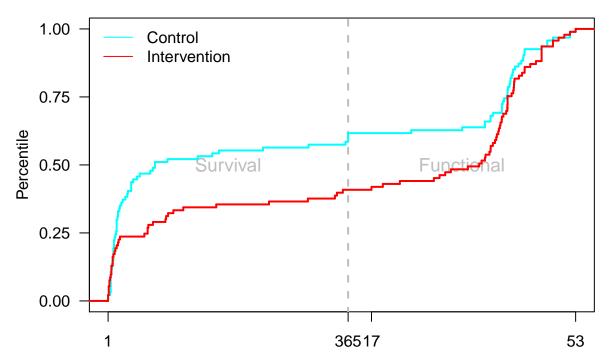
#### **Control**

## Intervention





### Composite Quantile



# Bootstrap Results

## Hypothesis Testing

	Delta0	Delta1	Theta	SD	PValue
1	-2.20	-2.20	-0.12	0.11	0.26
2	0.00	-2.20	-0.12	0.11	0.27
3	2.20	-2.20	-0.11	0.10	0.26
4	-2.20	0.00	-0.18	0.11	0.10
5	0.00	0.00	-0.16	0.11	0.13
6	2.20	0.00	-0.14	0.10	0.16
7	-2.20	2.20	-0.23	0.10	0.02
8	0.00	2.20	-0.20	0.10	0.04
9	2.20	2.20	-0.17	0.10	0.09

#### Median

	Delta	TRT	Q	Quant	LB	UB
1	-2.20	0.00	0.25	-1.00	-0.32	-0.03
2	-2.20	0.00	0.50	-1.00	-0.30	-0.02
3	-2.20	0.00	0.75	40.09	-0.26	-0.01
4	-2.20	1.00	0.25	-1.00	-0.34	-0.07
5	-2.20	1.00	0.50	34.74	-0.33	-0.05
6	-2.20	1.00	0.75	39.01	-0.29	-0.04
7	0.00	0.00	0.25	-1.00	-0.36	-0.12
8	0.00	0.00	0.50	-1.00	-0.35	-0.10
9	0.00	0.00	0.75	40.87	-0.34	-0.09
10	0.00	1.00	0.25	-1.00	-0.32	-0.03
11	0.00	1.00	0.50	36.00	-0.30	-0.02
12	0.00	1.00	0.75	41.00	-0.26	-0.01
13	2.20	0.00	0.25	-1.00	-0.34	-0.07
14	2.20	0.00	0.50	-1.00	-0.33	-0.05
15	2.20	0.00	0.75	41.99	-0.29	-0.04
16	2.20	1.00	0.25	-1.00	-0.36	-0.12
17	2.20	1.00	0.50	36.00	-0.35	-0.10
18	2.20	1.00	0.75	42.74	-0.34	-0.09