Create CDISC pilot tables

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Setup

This script creates RDF data cubes from .csv files.

```
library(rrdfancillary)
library(rrdfcdisc)
library(rrdfqb)
library(rrdfqbcrnd0)
devtools::load_all(pkg="../..")
```

Loading rrdfqbcrndex

All files are stored in the directory

```
targetDir<- system.file("extdata/sample-rdf", package="rrdfqbcrndex")
(targetDir)</pre>
```

[1] "/home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf"

Create from demo data PhUSE scripting program

The files are generated by a SAS program - extdata/sample-workflow/adsl1.sas. The input files are read directly from .csv files instead of using the workbook, to avoid the extra step with the workbook, as the input files may be updated by running the SAS program.

```
tab1x01ObsDataCsvFn<- system.file("extdata/sample-cfg", "TAB1X01.csv", package="rrdfqbcrndex")
tab1x010bsData <- read.csv(tab1x010bsDataCsvFn,stringsAsFactors=FALSE)
##TODO add measurefmt; quick hack - affects vignettes/cube-from-workbook.Rmd and
##TODO inst/data-raw/create-qb-examples-as-ttl.Rmd
if (!( "measurefmt" %in% names(tab1x010bsData))) {
tab1x010bsData$measurefmt<- "%6.1f"
tab1x010bsData$measurefmt[ tab1x010bsData$procedure %in% c("n", "nmiss", "count") ]<- "%6.0f"
## sprintf( tab1x010bsData$measurefmt, tab1x010bsData$measure)
tab1x01MetaDataCsvFn<- system.file("extdata/sample-cfg", "TAB1X01-Components.csv", package="rrdfqbcrnde"
tab1x01MetaData <- read.csv(tab1x01MetaDataCsvFn,stringsAsFactors=FALSE)
tab1x01.cube.fn<- BuildCubeFromDataFrames(tab1x01MetaData, tab1x01ObsData)
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Placebo --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
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## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): count --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): quantity --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Placebo --
## CODING ERROR- no decode value
```

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## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
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## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): percent --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): proportion
## -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Xanomeline
## High Dose -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
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## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
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```

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## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Placebo --
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```

```
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```

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## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): -- CODING
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## -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Placebo --
## CODING ERROR- no decode value
```

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## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
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## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): N -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
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## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): percent --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): proportion
## -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Placebo --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
```

```
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): count --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): quantity --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Placebo --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): percent --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): proportion
## -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Xanomeline
## High Dose -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): ALL --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): count --
## CODING ERROR- no decode value
```

```
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): quantity --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Xanomeline
## High Dose -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): percent --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): proportion
## -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Xanomeline
## Low Dose -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): ALL --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): count --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): quantity --
## CODING ERROR- no decode value
```

```
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Xanomeline
## Low Dose -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): percent --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): proportion
## -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): N -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): count --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): quantity --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): -- CODING
## ERROR- no decode value
```

```
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): N -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): percent --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): proportion
## -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): count --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): quantity --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
```

```
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): percent --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): proportion
## -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Placebo --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): N -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): count --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): quantity --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Placebo --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): ALL --
## CODING ERROR- no decode value
```

```
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): N -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): percent --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): proportion
## -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Xanomeline
## High Dose -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): N -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): count --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): quantity --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Xanomeline
## High Dose -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): N -- CODING
## ERROR- no decode value
```

```
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): percent --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): proportion
## -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Xanomeline
## Low Dose -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): N -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): count --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): quantity --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Xanomeline
## Low Dose -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): N -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
```

```
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): percent --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): proportion
## -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Placebo --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): count --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): quantity --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Placebo --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): ALL --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): percent --
## CODING ERROR- no decode value
```

```
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): proportion
## -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Xanomeline
## High Dose -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): count --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): quantity --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Xanomeline
## High Dose -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): ALL --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): percent --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): proportion
## -- CODING ERROR- no decode value
```

```
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Xanomeline
## Low Dose -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): count --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): quantity --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Xanomeline
## Low Dose -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): percent --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): proportion
## -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): -- CODING
## ERROR- no decode value
```

```
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): ALL --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): N -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): count --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): quantity --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): N -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): percent --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): proportion
## -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
```

```
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): count --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): quantity --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): percent --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): proportion
## -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Placebo --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
```

```
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): ALL --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): count --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): quantity --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Placebo --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): percent --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): proportion
## -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Xanomeline
## High Dose -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
```

```
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): ALL --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): count --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): quantity --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Xanomeline
## High Dose -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): ALL --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): percent --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): proportion
## -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Xanomeline
## Low Dose -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
```

```
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): count --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): quantity --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Xanomeline
## Low Dose -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): ALL --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): percent --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): proportion
## -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Placebo --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): count --
## CODING ERROR- no decode value
```

```
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): quantity --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Placebo --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): ALL --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): percent --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): proportion
## -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Xanomeline
## High Dose -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): count --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): quantity --
## CODING ERROR- no decode value
```

```
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Xanomeline
## High Dose -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): percent --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): proportion
## -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Xanomeline
## Low Dose -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): count --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): quantity --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Xanomeline
## Low Dose -- CODING ERROR- no decode value
```

```
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): ALL --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): percent --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): proportion
## -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): ALL --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): ALL --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): count --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): quantity --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
```

```
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): ALL --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): percent --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): proportion
## -- CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): count --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): quantity --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): -- CODING
## ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value
```

```
## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): _ALL_ --
## CODING ERROR- no decode value

## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): Y -- CODING

## ERROR- no decode value

## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): percent --
## CODING ERROR- no decode value

## Warning in ph.recode(obsData[i, qbdim], recode.list[[qbdim]]): proportion

## -- CODING ERROR- no decode value

cat("TAB1X01 cube stored as ", normalizePath(tab1x01.cube.fn), "\n")

## TAB1X01 cube stored as /tmp/Rtmp5E1kxG/DC-TAB1X01-R-V-O-O-O.ttl

targetFile<- file.path(targetDir, "CDISC-pilot-TAB1X01.ttl")

if (file.copy( tab1x01.cube.fn, targetFile, overwrite=TRUE)) {
    cat("RDF data cube copied to ", normalizePath(targetFile), "\n")
}</pre>
```

 $\verb|## RDF data cube copied to /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/CDISC-pixed-pixe$

Now look at the generated cubes by loading the turtle files.

```
dataCubeFile<- targetFile</pre>
```

The rest of the code only depends on the value of dataCubeFile.

```
checkCube <- new.rdf(ontology=FALSE) # Initialize
cat("Loading RDF data cube from ", normalizePath(dataCubeFile), "\n")</pre>
```

Loading RDF data cube from /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/CDISC

```
temp<- load.rdf(dataCubeFile, format="TURTLE", appendTo= checkCube)
summarize.rdf(checkCube)</pre>
```

```
## [1] "Number of triples: 1442"
```

Get the values in the cube

First set values for accessing the cube.

```
dsdName<- GetDsdNameFromCube( checkCube )
domainName<- GetDomainNameFromCube( checkCube )
forsparqlprefix<- GetForSparqlPrefix( domainName )</pre>
```

The next statement shows the first 10 triples in the cube.

```
observations1Rq<- paste( forsparqlprefix,
,
select *
where {?s ?p ?o .}
limit 10
',
"\n"
)
observations1<- sparql.rdf(checkCube, observations1Rq )
knitr::kable(head(observations1))</pre>
```

s	p	0
ds:obs50 ds:obs50 ds:obs50 ds:obs50 ds:obs50	rdf:type crnd-dimension:ittfl crnd-dimension:comp24fl crnd-dimension:trt01p crnd-dimension:procedure crnd-dimension:efffl	qb:Observation code:CODING ERROR- no decode value code:CODING ERROR- no decode value code:CODING ERROR- no decode value code:CODING ERROR- no decode value code:CODING ERROR- no decode value

The next statement shows the first 10 triples in the cube, where the subject is a qb:Observation.

\mathbf{S}	p	0
ds:obs49	rdfs:label	49
ds:obs49	crnd-dimension:disconfl	code:CODING ERROR- no decode value
ds:obs49	crnd-dimension: $trt01p$	code:CODING ERROR- no decode value
ds:obs49	crnd-dimension:procedure	code:CODING ERROR- no decode value
ds:obs49	qb:dataSet	ds:dataset-TAB1X01
ds:obs49	crnd-dimension:comp24fl	code:CODING ERROR- no decode value
ds:obs49	crnd-dimension:ittfl	code:CODING ERROR- no decode value
ds:obs49	${\it crnd-attribute:} denominator$	
ds:obs49	crnd-dimension:efffl	code:CODING ERROR- no decode value
ds:obs49	crnd-attribute:unit	NA

Get cube components

The cube components are shown in the next output.

```
componentsRq<- GetComponentSparqlQuery( forsparqlprefix, dsdName )
components<- as.data.frame(sparql.rdf(checkCube, componentsRq), stringsAsFactors=FALSE)
components$vn<- gsub("crnd-dimension:|crnd-attribute:|crnd-measure:","",components$p)
knitr::kable(components[,c("vn", "label")])</pre>
```

vn	label
comp24fl	comp24fl
disconfl	disconfl
efffl	efffl
factor	Type of procedure (quantity, proportion)
ittfl	ittfl
procedure	Statistical Procedure
saffl	saffl
trt01p	Treatment Arm

The codelists are shown in the next output.

```
codelistsRq<- GetCodeListSparqlQuery( forsparqlprefix, dsdName )
codelists<- as.data.frame(sparql.rdf(checkCube, codelistsRq), stringsAsFactors=FALSE)
codelists$vn<- gsub("crnd-dimension:|crnd-attribute:|crnd-measure:","",codelists$dimension)
codelists$clc<- gsub("code:","",codelists$cl)
knitr::kable(codelists[,c("vn", "clc", "clprefLabel")])</pre>
```

vn	clc	clprefLabel
comp24fl	comp24fl-N	N
comp24fl	comp24fl-Y	Y
comp24fl	$\mathrm{comp}24\mathrm{fl}\text{-}ALL$	ALL
comp24fl	${ m comp}$ 24fl- $NONMISS$	NONMISS
disconfl	disconfl-Y	Y
disconfl	disconfl- ALL	ALL
disconfl	disconfl-NONMISS	NONMISS
efffl	efffl-N	N
efffl	efffl-Y	Y
efffl	$\operatorname{efffl-}ALL$	ALL
efffl	efffl-NONMISS	NONMISS
factor	factor- ALL	ALL
factor	factor-NONMISS	NONMISS
factor	factor-proportion	proportion
factor	factor-quantity	quantity
ittfl	ittfl-Y	Y
ittfl	ittfl- ALL	ALL
ittfl	${\it ittfl-NONMISS}$	NONMISS
procedure	procedure-count	count
procedure	procedure-percent	percent
saffl	saffl-Y	Y
saffl	saffl- ALL	ALL
saffl	saffl- $NONMISS$	NONMISS
trt01p	trt01p-	
trt01p	trt01p-Placebo	Placebo
trt01p	$trt01p\text{-Xanomeline_High_Dose}$	Xanomeline High Dose

vn	clc	clprefLabel
trt01p trt01p trt01p	$\begin{array}{c} {\rm trt01p\text{-}Xanomeline_Low_Dose} \\ {\rm trt01p\text{-}}ALL \\ {\rm trt01p\text{-}}NONMISS \end{array}$	Xanomeline Low Dose ALL $NONMISS$

The dimensions are shown in the next output.

```
dimensionsRq <- GetDimensionsSparqlQuery( forsparqlprefix )
dimensions<- sparql.rdf(checkCube, dimensionsRq)
knitr::kable(dimensions)</pre>
```

p

```
crnd-dimension:disconfl
crnd-dimension:saffl
crnd-dimension:trt01p
crnd-dimension:factor
crnd-dimension:procedure crnd-dimension:comp24fl
crnd-dimension:ittfl
crnd-dimension:efffl
```

Then the attributes as shown in the next output.

```
attributesRq<- GetAttributesSparqlQuery( forsparqlprefix )
attributes<- sparql.rdf(checkCube, attributesRq)
knitr::kable(attributes)</pre>
```

p

crnd-attribute:denominator crnd-attribute:unit

Get observations

And finally the SPARQL query for observations, showing only the first 10 observations.

observationsRq<- GetObservationsSparqlQuery(forsparqlprefix, domainName, dimensions, attributes) cat(observationsRq)

```
## prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
## prefix skos: <http://www.w3.org/2004/02/skos/core#>
## prefix prov: <http://www.w3.org/ns/prov#>
## prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#>
## prefix dcat: <http://www.w3.org/sdcat#>
## prefix owl: <http://www.w3.org/2002/07/owl#>
## prefix xsd: <http://www.w3.org/2001/XMLSchema#>
## prefix pav: <http://purl.org/pav>
## prefix dc: <http://purl.org/dc/elements/1.1/>
## prefix dct: <http://purl.org/dc/terms/>
## prefix mms: <http://rdf.cdisc.org/mms#>
```

```
## prefix cts: <http://rdf.cdisc.org/ct/schema#>
## prefix cdiscs: <http://rdf.cdisc.org/std/schema#>
## prefix cdash-1-1: <http://rdf.cdisc.org/std/cdash-1-1#>
## prefix cdashct: <http://rdf.cdisc.org/cdash-terminology#>
## prefix sdtmct: <a href="http://rdf.cdisc.org/sdtm-terminology">http://rdf.cdisc.org/sdtm-terminology</a>
## prefix sdtm-1-2: <http://rdf.cdisc.org/std/sdtm-1-2#>
## prefix sdtm-1-3: <http://rdf.cdisc.org/std/sdtm-1-3#>
## prefix sdtms-1-3: <a href="http://rdf.cdisc.org/sdtm-1-3/schema">http://rdf.cdisc.org/sdtm-1-3/schema">
## prefix sdtmig-3-1-2: <http://rdf.cdisc.org/std/sdtmig-3-1-2#>
## prefix sdtmig-3-1-3: <http://rdf.cdisc.org/std/sdtmig-3-1-3#>
## prefix sendct: <http://rdf.cdisc.org/send-terminology#>
## prefix sendig-3-0: <a href="http://rdf.cdisc.org/std/sendig-3-0#">http://rdf.cdisc.org/std/sendig-3-0#</a>
## prefix adamct: <http://rdf.cdisc.org/adam-terminology#>
## prefix adam-2-1: <a href="http://rdf.cdisc.org/std/adam-2-1">http://rdf.cdisc.org/std/adam-2-1">
## prefix adamig-1-0: <http://rdf.cdisc.org/std/adamig-1-0#>
## prefix adamvr-1-2: <a href="http://rdf.cdisc.org/std/adamvr-1-2">http://rdf.cdisc.org/std/adamvr-1-2">
## prefix qb: <http://purl.org/linked-data/cube#>
## prefix rrdfqbcrnd0: <http://www.example.org/rrdfqbcrnd0/>
## prefix code: <http://www.example.org/dc/code/>
## prefix dccs: <http://www.example.org/dc/tab1x01/dccs/>
## prefix ds: <http://www.example.org/dc/tab1x01/ds/>
## prefix crnd-dimension: <a href="http://www.example.org/dc/dimension">
## prefix crnd-attribute: <http://www.example.org/dc/attribute#>
## prefix crnd-measure: <a href="http://www.example.org/dc/measure">http://www.example.org/dc/measure</a>
##
## select * where {
## ?s a qb:Observation ;
        qb:dataSet ds:dataset-TAB1X01 ;
##
##
        crnd-dimension:disconfl ?disconfl;
##
        crnd-dimension:saffl ?saffl;
##
        crnd-dimension:trt01p ?trt01p;
##
        crnd-dimension:factor ?factor;
##
        crnd-dimension:procedure ?procedure;
##
        crnd-dimension:comp24fl ?comp24fl;
##
        crnd-dimension:ittfl ?ittfl;
##
        crnd-dimension:efffl ?efffl;
##
        crnd-attribute:denominator ?denominator;
##
        crnd-attribute:unit ?unit:
##
        crnd-measure:measure ?measure .
## optional{ ?disconfl skos:prefLabel ?disconflvalue . }
## optional{ ?saffl skos:prefLabel ?safflvalue . }
## optional{ ?trt01p skos:prefLabel ?trt01pvalue . }
## optional{ ?factor skos:prefLabel ?factorvalue . }
## optional{ ?procedure skos:prefLabel ?procedurevalue . }
## optional{ ?comp24fl skos:prefLabel ?comp24flvalue . }
## optional{ ?ittfl skos:prefLabel ?ittflvalue . }
## optional{ ?efffl skos:prefLabel ?effflvalue . }
## }
## order by ?s
observations<- as.data.frame(sparql.rdf(checkCube, observationsRq), stringsAsFactors=FALS
knitr::kable(observations[ 1:10 ,
   c(pasteO(sub("crnd-dimension:|crnd-attribute:|crnd-measure:", "", dimensions), "value"), sub("crnd-dimensions
```

disconflyalue	safflvalue	trt01pvalue	factorvalue	procedurevalue	${\rm comp24flvalue}$	ittflvalue	effflvalue	denominato
NA	NA	NA	NA	NA	NA	NA	NA	
NA	NA	NA	NA	NA	NA	NA	NA	ittfl
NA	NA	NA	NA	NA	NA	NA	NA	
NA	NA	NA	NA	NA	NA	NA	NA	ittfl
NA	NA	NA	NA	NA	NA	NA	NA	
NA	NA	NA	NA	NA	NA	NA	NA	ittfl
NA	NA	NA	NA	NA	NA	NA	NA	
NA	NA	NA	NA	NA	NA	NA	NA	ittfl
NA	NA	NA	NA	NA	NA	NA	NA	
NA	NA	NA	NA	NA	NA	NA	NA	saffl

Get observations with labels

The SPARQL query for observations with labels for variables, showing only the first 10 observations.

observationsDescriptionRq<- GetObservationsWithDescriptionSparqlQuery(forsparqlprefix, domainName, dimecat(observationsDescriptionRq)

```
## prefix rdf: <a href="http://www.w3.org/1999/02/22-rdf-syntax-ns">http://www.w3.org/1999/02/22-rdf-syntax-ns</a>
## prefix skos: <http://www.w3.org/2004/02/skos/core#>
## prefix prov: <http://www.w3.org/ns/prov#>
## prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#>
## prefix dcat: <http://www.w3.org/ns/dcat#>
## prefix owl: <http://www.w3.org/2002/07/owl#>
## prefix xsd: <http://www.w3.org/2001/XMLSchema#>
## prefix pav: <http://purl.org/pav>
## prefix dc: <http://purl.org/dc/elements/1.1/>
## prefix dct: <http://purl.org/dc/terms/>
## prefix mms: <http://rdf.cdisc.org/mms#>
## prefix cts: <http://rdf.cdisc.org/ct/schema#>
## prefix cdiscs: <http://rdf.cdisc.org/std/schema#>
## prefix cdash-1-1: <http://rdf.cdisc.org/std/cdash-1-1#>
## prefix cdashct: <http://rdf.cdisc.org/cdash-terminology#>
## prefix sdtmct: <a href="http://rdf.cdisc.org/sdtm-terminology">http://rdf.cdisc.org/sdtm-terminology</a>
## prefix sdtm-1-2: <http://rdf.cdisc.org/std/sdtm-1-2#>
## prefix sdtm-1-3: <http://rdf.cdisc.org/std/sdtm-1-3#>
## prefix sdtms-1-3: <http://rdf.cdisc.org/sdtm-1-3/schema#>
## prefix sdtmig-3-1-2: <http://rdf.cdisc.org/std/sdtmig-3-1-2#>
## prefix sdtmig-3-1-3: <http://rdf.cdisc.org/std/sdtmig-3-1-3#>
## prefix sendct: <a href="http://rdf.cdisc.org/send-terminology">http://rdf.cdisc.org/send-terminology</a>
## prefix sendig-3-0: <a href="http://rdf.cdisc.org/std/sendig-3-0#">http://rdf.cdisc.org/std/sendig-3-0#</a>
## prefix adamct: <http://rdf.cdisc.org/adam-terminology#>
## prefix adam-2-1: <http://rdf.cdisc.org/std/adam-2-1#>
## prefix adamig-1-0: <a href="http://rdf.cdisc.org/std/adamig-1-0#">http://rdf.cdisc.org/std/adamig-1-0#</a>
## prefix adamvr-1-2: <http://rdf.cdisc.org/std/adamvr-1-2#>
## prefix qb: <http://purl.org/linked-data/cube#>
## prefix rrdfqbcrnd0: <http://www.example.org/rrdfqbcrnd0/>
## prefix code: <http://www.example.org/dc/code/>
## prefix dccs: <http://www.example.org/dc/tab1x01/dccs/>
## prefix ds: <http://www.example.org/dc/tab1x01/ds/>
## prefix crnd-dimension: <http://www.example.org/dc/dimension#>
```

```
## prefix crnd-attribute: <a href="http://www.example.org/dc/attribute">http://www.example.org/dc/attribute</a>
## prefix crnd-measure: <a href="http://www.example.org/dc/measure#">http://www.example.org/dc/measure#>
## select * where {
## ?s a qb:Observation ;
## qb:dataSet ds:dataset-TAB1X01 ;
## crnd-dimension:disconfl ?disconfl;
## crnd-dimension:saffl ?saffl:
## crnd-dimension:trt01p ?trt01p;
## crnd-dimension:factor ?factor;
## crnd-dimension:procedure ?procedure;
## crnd-dimension:comp24fl ?comp24fl;
## crnd-dimension:ittfl ?ittfl;
## crnd-dimension:efffl ?efffl;
## crnd-attribute:denominator ?denominator;
## crnd-attribute:unit ?unit;
                               ?measure .
## crnd-measure:measure
## optional{ ?disconfl skos:prefLabel ?disconflvalue . }
## optional{ ?saffl skos:prefLabel ?safflvalue . }
## optional{ ?trt01p skos:prefLabel ?trt01pvalue . }
## optional{ ?factor skos:prefLabel ?factorvalue . }
## optional{ ?procedure skos:prefLabel ?procedurevalue . }
## optional{ ?comp24fl skos:prefLabel ?comp24flvalue . }
## optional{ ?ittfl skos:prefLabel ?ittflvalue . }
## optional{ ?efffl skos:prefLabel ?effflvalue . }
## optional{ crnd-dimension:disconfl rdfs:label ?disconfllabel . }
## optional{ crnd-dimension:saffl rdfs:label ?saffllabel . }
## optional{ crnd-dimension:trt01p rdfs:label ?trt01plabel . }
## optional{ crnd-dimension:factor rdfs:label ?factorlabel . }
## optional{ crnd-dimension:procedure rdfs:label ?procedurelabel . }
## optional{ crnd-dimension:comp24fl rdfs:label ?comp24fllabel . }
## optional{ crnd-dimension:ittfl rdfs:label ?ittfllabel . }
## optional{ crnd-dimension:efffl rdfs:label ?efffllabel . }
## BIND( IRI(crnd-dimension:disconfl) as ?disconflIRI)
## BIND( IRI(crnd-dimension:saff1) as ?saff1IRI)
## BIND( IRI(crnd-dimension:trt01p) as ?trt01pIRI)
## BIND( IRI(crnd-dimension:factor) as ?factorIRI)
## BIND( IRI(crnd-dimension:procedure) as ?procedureIRI)
## BIND( IRI(crnd-dimension:comp24f1) as ?comp24f1IRI)
## BIND( IRI(crnd-dimension:ittfl) as ?ittflIRI)
## BIND( IRI(crnd-dimension:efffl) as ?effflIRI)
## BIND( IRI( ?s ) AS ?measureIRI)
## }
observationsDesc<- as.data.frame(sparql.rdf(checkCube, observationsDescriptionRq), stringsAsFactors=FA
knitr::kable(observationsDesc[ 1:10 ,
     c(paste0(rep(sub("crnd-dimension:|crnd-attribute:|crnd-measure:", "", dimensions),each=3),
       c("label", "value", "IRI")),
       sub("crnd-dimension:|crnd-attribute:|crnd-measure:", "", attributes), "measure", "measureIRI"
```

disconfllabel	disconflyalue	disconfIRI	saffllabel	safflvalue	saffIRI	trt01plabel	trt
disconfl	NA	crnd-dimension:disconfl	saffl	NA	crnd-dimension:saffl	Treatment Arm	NA

disconfllabel	disconflyalue	disconfIRI	saffllabel	safflvalue	saffIRI	trt01plabel	trt(
disconfl	NA	crnd-dimension:disconfl	saffl	NA	crnd-dimension:saffl	Treatment Arm	NA
disconfl	NA	crnd-dimension:disconfl	saffl	NA	crnd-dimension:saffl	Treatment Arm	NA
disconfl	NA	crnd-dimension:disconfl	saffl	NA	crnd-dimension:saffl	Treatment Arm	NA
disconfl	NA	crnd-dimension:disconfl	saffl	NA	crnd-dimension:saffl	Treatment Arm	NA
disconfl	NA	crnd-dimension:disconfl	saffl	NA	crnd-dimension:saffl	Treatment Arm	NA
disconfl	NA	crnd-dimension:disconfl	saffl	NA	crnd-dimension:saffl	Treatment Arm	NA
disconfl	NA	crnd-dimension:disconfl	saffl	NA	crnd-dimension:saffl	Treatment Arm	NA
disconfl	NA	crnd-dimension:disconfl	saffl	NA	crnd-dimension:saffl	Treatment Arm	NA
disconfl	NA	crnd-dimension:disconfl	saffl	NA	crnd-dimension:saffl	Treatment Arm	NA

Reproduce the metadata for the workbook from cube

Here is an example of roundtripping: make the metadata used for the workbook from RDF data cube.

First get the dimensions, measure and attribute

```
workbookDimAttrMeasRq<- GetDimAttrMeasInWorkbookFormatSparqlQuery( forsparqlprefix )
dimensionsattr<- sparql.rdf(checkCube, workbookDimAttrMeasRq )
knitr::kable(dimensionsattr)</pre>
```

$\overline{\text{compType}}$	compName	codeType	nciDomainValue
dimension	crnd-dimension:disconfl	NA	NA
dimension	crnd-dimension:saffl	NA	NA
dimension	crnd-dimension: $trt01p$	NA	NA
dimension	crnd-dimension:factor	NA	NA
dimension	crnd-dimension:procedure	NA	NA
dimension	crnd-dimension:comp24fl	NA	NA
dimension	crnd-dimension:ittfl	NA	NA
dimension	crnd-dimension:efffl	NA	NA
attribute	crnd-attribute:denominator	NA	NA
attribute	crnd-attribute:unit	NA	NA
measure	crnd-measure:measure	NA	NA

Secondly, get the metadata for the workbook. To get the metadata element "cubeVersion" a workaround is needed. The cubeversion is not directly available but from dcat:distribution derived as the result of paste0("DC-", domainName,"-R-V-",cubeVersion, ".ttl").

```
workbookMetadataRq<- GetMetaDataInWorkbookFormatSparqlQuery( forsparqlprefix )
metadata<- sparql.rdf(checkCube, workbookMetadataRq)
cubeVersion<- gsub("-",".", gsub("DC-.*-R-V-([^\\.]+).ttl", "\\1", metadata[ metadata[,2]=="distribution", metadataX<- rbind(metadata, cbind(compType="metadata", compName="cubeVersion", compLabel=cubeVersion))
knitr::kable(metadataX)</pre>
```

compType	compName	compLabel
metadata	title	Demographics Analysis Results
metadata	distribution	DC-TAB1X01-R-V-0-0-0.ttl
metadata	comment	
$\operatorname{metadata}$	label	Table 14-1.01 Summary of Populations

	compType	compName	compLabel
compLabel	metadata metadata metadata	description obsFileName cubeVersion	Data from adsl1.sas program $tab1x01.csv$ 0.0.0

Session information

sessionInfo()

```
## R version 3.2.3 (2015-12-10)
## Platform: x86_64-redhat-linux-gnu (64-bit)
## Running under: Fedora 23 (Workstation Edition)
##
## locale:
   [1] LC_CTYPE=en_GB.UTF-8
                                      LC_NUMERIC=C
   [3] LC_TIME=en_GB.UTF-8
##
                                     LC_COLLATE=en_GB.UTF-8
    [5] LC_MONETARY=en_GB.UTF-8
                                     LC_MESSAGES=en_GB.UTF-8
   [7] LC_PAPER=en_GB.UTF-8
                                     LC_NAME=en_GB.UTF-8
##
   [9] LC ADDRESS=en GB.UTF-8
                                     LC TELEPHONE=en GB.UTF-8
## [11] LC_MEASUREMENT=en_GB.UTF-8
                                     LC_IDENTIFICATION=en_GB.UTF-8
## attached base packages:
## [1] methods stats
                          graphics grDevices utils
                                                         datasets base
##
## other attached packages:
  [1] rrdfqbcrndex_0.2.3 rrdfqbcrnd0_0.2.3
                                               rrdfqb_0.2.3
  [4] xlsx_0.5.7
                            xlsxjars_0.6.1
                                               rrdfcdisc_0.2.3
  [7] devtools_1.11.0
                            RCurl_1.95-4.8
                                               bitops_1.0-6
## [10] rrdfancillary_0.2.3 rrdf_2.1.2
                                               rrdflibs_1.4.0
## [13] rJava_0.9-8
##
## loaded via a namespace (and not attached):
  [1] Rcpp_0.12.4
                       knitr_1.12.3
                                       magrittr_1.5
                                                        roxygen2_5.0.1
  [5] highr 0.5.1
                       stringr 1.0.0
                                       tools 3.2.3
                                                        withr 1.0.1
## [9] htmltools_0.3.5 yaml_2.1.13
                                       digest_0.6.9
                                                        formatR_1.3
## [13] memoise_1.0.0 evaluate_0.8.3 rmarkdown_0.9.5 stringi_1.0-1
```