# Usage of cube DEMO

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### Introduction

This is not a good example yet. TODO(mja): fix it.

# Create DEMO sample table from CSV file

This script creates the result and codelist for a simple DEMO table.

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

#### ## Loading rrdfqbcrndex

```
library(rrdfqbcrnd0)
library(rrdfqb)

cubeVocabularyFn<- system.file("extdata/cube-vocabulary-rdf","cube.ttl", package="rrdfqb")

dataCubeFile<- system.file("extdata/sample-rdf", "DC-DEMO-sample.ttl", package="rrdfqbcrndex")

store <- new.rdf()  # Initialize

cat("Loading cube specfication from ", cubeVocabularyFn, "\n")</pre>
```

## Loading cube specfication from /home/ma/R/x86\_64-redhat-linux-gnu-library/3.2/rrdfqb/extdata/cube-v

```
tmp<- load.rdf(cubeVocabularyFn, format="TURTLE", appendTo= store)
cat("Loading cube from ", dataCubeFile, "\n")</pre>
```

## Loading cube from /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DC-DEMO-sample

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

```
## [1] "Number of triples: 3368"
```

## Execute the DEMO\* SPARQL queries

```
rqFiles<- system.file("extdata/sample-rdf", list.files(system.file("extdata/sample-rdf", package="rrdf

for (rqFile in rqFiles) {
    cat("File ", rqFile, "\n")
    rq<- pasteO(readLines(rqFile),collapse="\n")
    res<- data.frame(sparql.rdf(store, rq),stringsAsFactors=FALSE)
    print(nrow(res))
    if (nrow(res)>0) {
        print(knitr::kable(res))
        }
}
```

```
## File /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DEMOattributes.rq
## [1] 6
##
##
## p
## -----
## crnd-attribute:cellpartno
## crnd-attribute:measurefmt
## crnd-attribute:colno
## crnd-attribute:denominator
## crnd-attribute:unit
## crnd-attribute:rowno
## File /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DEMOcodelist.rq
## [1] 301
##
##
## codeList
                   codelevel
                                                                         codelist
                                                                                          prefLabel
## code:ethnic
                   code:factor-quantity
                                                                         code:factor
                                                                                          quantity
## code:ethnic
                   code:procedure-max
                                                                         code:procedure
                                                                                          max
## code:ethnic
                   code:procedure-q3
                                                                         code:procedure
                                                                                          q3
## code:ethnic
                   code:sex-F
                                                                         code:sex
                                                                                          F
## code:ethnic
                   code:agegr1-_65
                                                                                          <65
                                                                         code:agegr1
## code:ethnic
                   code:factor-proportion
                                                                         code:factor
                                                                                          proportion
## code:ethnic
                   code:agegr1-_80
                                                                                          >80
                                                                         code:agegr1
## code:ethnic
                   code:race-_ALL_
                                                                         code:race
                                                                                          _ALL_
## code:ethnic
                   code:procedure-mean
                                                                         code:procedure
                                                                                          mean
## code:ethnic
                   code:trt01a-_ALL_
                                                                         code:trt01a
                                                                                          _ALL_
## code:ethnic
                   code:sex-M
                                                                         code:sex
                                                                                          М
```

```
HISPANIC OR
## code:ethnic
                     code:ethnic-HISPANIC OR LATINO
                                                                              code:ethnic
## code:ethnic
                     code:race-NATIVE_HAWAIIAN_OR_OTHER_PACIFIC_ISLANDER
                                                                              code:race
                                                                                                NATIVE HAWAT
                                                                                                NOT HISPANIC
## code:ethnic
                     code:ethnic-NOT HISPANIC OR LATINO
                                                                              code:ethnic
## code:ethnic
                     code:procedure-median
                                                                              code:procedure
                                                                                                median
## code:ethnic
                     code:ethnic-_NONMISS_
                                                                              code:ethnic
                                                                                                NONMISS
## code:ethnic
                     code:procedure-q1
                                                                              code:procedure
                                                                                                q1
## code:ethnic
                     code:trt01a-Xanomeline High Dose
                                                                              code:trt01a
                                                                                                Xanomeline H
## code:ethnic
                     code:agegr1-_ALL_
                                                                                                ALL
                                                                              code:agegr1
## code:ethnic
                     code:sex-UN
                                                                              code:sex
                                                                                                UN
## code:ethnic
                     code:sex-_ALL_
                                                                              code:sex
                                                                                                _ALL_
## code:ethnic
                     code:race-ASIAN
                                                                              code:race
                                                                                                ASIAN
## code:ethnic
                     code:race-WHITE
                                                                                                WHITE
                                                                              code:race
## code:ethnic
                     code:trt01a-_NONMISS_
                                                                              code:trt01a
                                                                                                _NONMISS_
## code:ethnic
                     code:sex-_NONMISS_
                                                                              code:sex
                                                                                                {\tt \_NONMISS}_{\tt \_}
                     code:factor-age
## code:ethnic
                                                                              code:factor
                                                                                                age
## code:ethnic
                     code:ethnic-_ALL_
                                                                              code:ethnic
                                                                                                _ALL_
## code:ethnic
                     code:procedure-n
                                                                              code:procedure
                     code:race-AMERICAN_INDIAN_OR_ALASKA_NATIVE
## code:ethnic
                                                                              code:race
                                                                                                AMERICAN IND
## code:ethnic
                     code:trt01a-Placebo
                                                                              code:trt01a
                                                                                                Placebo
## code:ethnic
                     code:factor-weightbl
                                                                              code:factor
                                                                                                weightbl
## code:ethnic
                     code:trt01a-Xanomeline_Low_Dose
                                                                              code:trt01a
                                                                                                Xanomeline L
## code:ethnic
                     code:factor-_ALL_
                                                                              code:factor
                                                                                                ALL
## code:ethnic
                     code:procedure-percent
                                                                              code:procedure
                                                                                                percent
## code:ethnic
                     code:agegr1-65-80
                                                                              code:agegr1
                                                                                                65-80
## code:ethnic
                     code:procedure-min
                                                                              code:procedure
                                                                                                min
## code:ethnic
                     code:race-_NONMISS_
                                                                              code:race
                                                                                                _NONMISS_
## code:ethnic
                     code:agegr1-_NONMISS_
                                                                              code:agegr1
                                                                                                _NONMISS_
## code:ethnic
                     code:race-BLACK_OR_AFRICAN_AMERICAN
                                                                                                BLACK OR AFR
                                                                              code:race
## code:ethnic
                     code:factor-_NONMISS_
                                                                              code:factor
                                                                                                NONMISS_
## code:ethnic
                     code:sex-U
                                                                              code:sex
## code:ethnic
                     code:procedure-count
                                                                              code:procedure
                                                                                                count
## code:ethnic
                     code:procedure-std
                                                                              code:procedure
                                                                                                std
## code:agegr1
                     code:factor-quantity
                                                                              code:factor
                                                                                                quantity
## code:agegr1
                     code:procedure-max
                                                                              code:procedure
                                                                                                max
## code:agegr1
                     code:procedure-q3
                                                                              code:procedure
                                                                                                q3
## code:agegr1
                     code:sex-F
                                                                              code:sex
## code:agegr1
                     code:agegr1-_65
                                                                              code:agegr1
                                                                                                <65
## code:agegr1
                     code:factor-proportion
                                                                              code:factor
                                                                                                proportion
## code:agegr1
                     code:agegr1-_80
                                                                              code:agegr1
                                                                                                >80
## code:agegr1
                     code:race-_ALL_
                                                                              code:race
                                                                                                _ALL_
## code:agegr1
                     code:procedure-mean
                                                                              code:procedure
                                                                                                mean
## code:agegr1
                     code:trt01a- ALL
                                                                              code:trt01a
                                                                                                ALL
## code:agegr1
                     code:sex-M
                                                                              code:sex
                     code:ethnic-HISPANIC_OR_LATINO
                                                                                                HISPANIC OR
## code:agegr1
                                                                              code:ethnic
                     code:race-NATIVE_HAWAIIAN_OR_OTHER_PACIFIC_ISLANDER
                                                                                                NATIVE HAWAI
## code:agegr1
                                                                              code:race
                     code:ethnic-NOT_HISPANIC_OR_LATINO
                                                                                                NOT HISPANIC
## code:agegr1
                                                                              code:ethnic
## code:agegr1
                     code:procedure-median
                                                                              code:procedure
                                                                                                median
                     code:ethnic-_NONMISS_
                                                                                                _NONMISS_
## code:agegr1
                                                                              code:ethnic
## code:agegr1
                     code:procedure-q1
                                                                              code:procedure
                                                                                                q1
                     code:trt01a-Xanomeline_High_Dose
## code:agegr1
                                                                              code:trt01a
                                                                                                Xanomeline H
## code:agegr1
                     code:agegr1-_ALL_
                                                                              code:agegr1
                                                                                                _{\mathtt{ALL}}_{\mathtt{}}
                     code:sex-UN
                                                                                                UN
## code:agegr1
                                                                              code:sex
## code:agegr1
                     code:sex- ALL
                                                                              code:sex
                                                                                                ALL
## code:agegr1
                     code:race-ASIAN
                                                                              code:race
                                                                                                ASIAN
```

```
## code:agegr1
                     code:race-WHITE
                                                                              code:race
                                                                                                WHITE
## code:agegr1
                     code:trt01a-_NONMISS_
                                                                              code:trt01a
                                                                                                _NONMISS_
## code:agegr1
                                                                                                _NONMISS_
                     code:sex- NONMISS
                                                                              code:sex
                     code:factor-age
## code:agegr1
                                                                              code:factor
                                                                                                age
## code:agegr1
                     code:ethnic-_ALL_
                                                                              code:ethnic
                                                                                                _ALL_
## code:agegr1
                     code:procedure-n
                                                                              code:procedure
## code:agegr1
                     code:race-AMERICAN INDIAN OR ALASKA NATIVE
                                                                              code:race
                                                                                                AMERICAN IND
                     code:trt01a-Placebo
## code:agegr1
                                                                              code:trt01a
                                                                                                Placebo
## code:agegr1
                     code:factor-weightbl
                                                                              code:factor
                                                                                                weightbl
                     code:trt01a-Xanomeline_Low_Dose
## code:agegr1
                                                                              code:trt01a
                                                                                                Xanomeline L
## code:agegr1
                     code:factor-_ALL_
                                                                              code:factor
                                                                                                _ALL_
                     code:procedure-percent
                                                                              code:procedure
## code:agegr1
                                                                                                percent
                                                                                                65-80
## code:agegr1
                     code:agegr1-65-80
                                                                              code:agegr1
                                                                              code:procedure
## code:agegr1
                     code:procedure-min
                                                                                                min
## code:agegr1
                     code:race-_NONMISS_
                                                                              code:race
                                                                                                _NONMISS_
## code:agegr1
                     code:agegr1-_NONMISS_
                                                                              code:agegr1
                                                                                                _NONMISS_
                     code:race-BLACK_OR_AFRICAN_AMERICAN
                                                                                                BLACK OR AFR
## code:agegr1
                                                                              code:race
## code:agegr1
                     code:factor- NONMISS
                                                                              code:factor
                                                                                                NONMISS
                     code:sex-U
                                                                              code:sex
## code:agegr1
## code:agegr1
                     code:procedure-count
                                                                              code:procedure
                                                                                                count
## code:agegr1
                     code:procedure-std
                                                                              code:procedure
                                                                                                std
## code:procedure
                     code:factor-quantity
                                                                              code:factor
                                                                                                quantity
## code:procedure
                     code:procedure-max
                                                                              code:procedure
                                                                                                max
## code:procedure
                     code:procedure-q3
                                                                              code:procedure
                                                                                                q3
                     code:sex-F
## code:procedure
                                                                              code:sex
                                                                                                F
## code:procedure
                     code:agegr1-_65
                                                                              code:agegr1
                                                                                                <65
## code:procedure
                     code:factor-proportion
                                                                              code:factor
                                                                                                proportion
## code:procedure
                     code:agegr1-_80
                                                                              code:agegr1
                                                                                                >80
## code:procedure
                     code:race-_ALL_
                                                                              code:race
                                                                                                _{
m ALL}_{
m }
## code:procedure
                     code:procedure-mean
                                                                              code:procedure
                                                                                                mean
## code:procedure
                     code:trt01a-_ALL_
                                                                              code:trt01a
                                                                                                _{
m ALL}_{
m }
## code:procedure
                     code:sex-M
                                                                              code:sex
                                                                                                М
                                                                                                HISPANIC OR
## code:procedure
                     code:ethnic-HISPANIC_OR_LATINO
                                                                              code:ethnic
                     code:race-NATIVE_HAWAIIAN_OR_OTHER_PACIFIC_ISLANDER
                                                                                                NATIVE HAWAI
## code:procedure
                                                                              code:race
## code:procedure
                     code:ethnic-NOT_HISPANIC_OR_LATINO
                                                                              code:ethnic
                                                                                                NOT HISPANIC
## code:procedure
                     code:procedure-median
                                                                              code:procedure
                                                                                                median
## code:procedure
                     code:ethnic- NONMISS
                                                                              code:ethnic
                                                                                                NONMISS
## code:procedure
                     code:procedure-q1
                                                                              code:procedure
                                                                                                q1
## code:procedure
                     code:trt01a-Xanomeline_High_Dose
                                                                              code:trt01a
                                                                                                Xanomeline H
## code:procedure
                     code:agegr1-_ALL_
                                                                              code:agegr1
                                                                                                _ALL_
## code:procedure
                     code:sex-UN
                                                                              code:sex
                                                                                                UN
## code:procedure
                     code:sex- ALL
                                                                              code:sex
                                                                                                ALL
                     code:race-ASIAN
                                                                                                ASIAN
## code:procedure
                                                                              code:race
                     code:race-WHITE
## code:procedure
                                                                              code:race
                                                                                                WHITE
                     code:trt01a-_NONMISS_
## code:procedure
                                                                              code:trt01a
                                                                                                _NONMISS_
                     code:sex-_NONMISS_
## code:procedure
                                                                              code:sex
                                                                                                _NONMISS_
## code:procedure
                     code:factor-age
                                                                              code:factor
                                                                                                age
                     code:ethnic-_ALL_
## code:procedure
                                                                              code:ethnic
                                                                                                _{\mathtt{ALL}}_{\mathtt{}}
## code:procedure
                     code:procedure-n
                                                                              code:procedure
                     code:race-AMERICAN_INDIAN_OR_ALASKA_NATIVE
                                                                                                AMERICAN IND
## code:procedure
                                                                              code:race
## code:procedure
                     code:trt01a-Placebo
                                                                              code:trt01a
                                                                                                Placebo
## code:procedure
                     code:factor-weightbl
                                                                              code:factor
                                                                                                weightbl
## code:procedure
                     code:trt01a-Xanomeline_Low_Dose
                                                                              code:trt01a
                                                                                                Xanomeline L
## code:procedure
                     code:factor-_ALL_
                                                                              code:factor
                                                                                                ALL
```

```
## code:procedure
                     code:procedure-percent
                                                                             code:procedure
                                                                                               percent
## code:procedure
                     code:agegr1-65-80
                                                                             code:agegr1
                                                                                               65-80
                                                                             code:procedure
## code:procedure
                     code:procedure-min
                                                                                               min
                     code:race-_NONMISS_
## code:procedure
                                                                             code:race
                                                                                               _NONMISS_
## code:procedure
                     code:agegr1-_NONMISS_
                                                                             code:agegr1
                                                                                               _NONMISS_
                                                                                               BLACK OR AFR
## code:procedure
                     code:race-BLACK OR AFRICAN AMERICAN
                                                                             code:race
## code:procedure
                    code:factor- NONMISS
                                                                             code:factor
                                                                                               NONMISS
## code:procedure
                     code:sex-U
                                                                             code:sex
## code:procedure
                     code:procedure-count
                                                                             code:procedure
                                                                                               count
## code:procedure
                     code:procedure-std
                                                                             code:procedure
                                                                                               std
## code:factor
                     code:factor-quantity
                                                                             code:factor
                                                                                               quantity
## code:factor
                     code:procedure-max
                                                                             code:procedure
                                                                                               max
## code:factor
                     code:procedure-q3
                                                                             code:procedure
                                                                                               q3
## code:factor
                     code:sex-F
                                                                             code:sex
## code:factor
                     code:agegr1-_65
                                                                                               <65
                                                                             code:agegr1
## code:factor
                     code:factor-proportion
                                                                             code:factor
                                                                                               proportion
## code:factor
                                                                                               >80
                     code:agegr1-_80
                                                                             code:agegr1
## code:factor
                     code:race- ALL
                                                                             code:race
                                                                                               ALL
## code:factor
                     code:procedure-mean
                                                                             code:procedure
                                                                                               mean
## code:factor
                     code:trt01a- ALL
                                                                             code:trt01a
                                                                                               ALL
## code:factor
                     code:sex-M
                                                                             code:sex
## code:factor
                     code:ethnic-HISPANIC OR LATINO
                                                                             code:ethnic
                                                                                               HISPANIC OR
## code:factor
                     code:race-NATIVE_HAWAIIAN_OR_OTHER_PACIFIC_ISLANDER
                                                                                               NATIVE HAWAI
                                                                             code:race
## code:factor
                     code:ethnic-NOT HISPANIC OR LATINO
                                                                             code:ethnic
                                                                                               NOT HISPANIC
## code:factor
                     code:procedure-median
                                                                             code:procedure
                                                                                               median
## code:factor
                     code:ethnic- NONMISS
                                                                             code:ethnic
                                                                                               NONMISS
## code:factor
                     code:procedure-q1
                                                                             code:procedure
                                                                                               a1
## code:factor
                     code:trt01a-Xanomeline_High_Dose
                                                                                               Xanomeline H
                                                                             code:trt01a
## code:factor
                     code:agegr1-_ALL_
                                                                             code:agegr1
                                                                                               _ALL_
                                                                                               UN
## code:factor
                     code:sex-UN
                                                                             code:sex
## code:factor
                     code:sex-_ALL_
                                                                             code:sex
                                                                                               _{
m ALL}_{
m }
## code:factor
                     code:race-ASIAN
                                                                             code:race
                                                                                               ASIAN
## code:factor
                     code:race-WHITE
                                                                             code:race
                                                                                               WHITE
## code:factor
                     code:trt01a-_NONMISS_
                                                                             code:trt01a
                                                                                               _NONMISS_
                     code:sex-_NONMISS_
## code:factor
                                                                             code:sex
                                                                                               _NONMISS_
## code:factor
                     code:factor-age
                                                                             code:factor
                                                                                               age
## code:factor
                     code:ethnic- ALL
                                                                             code:ethnic
                                                                                               ALL
## code:factor
                     code:procedure-n
                                                                             code:procedure
                     code:race-AMERICAN_INDIAN_OR_ALASKA_NATIVE
## code:factor
                                                                             code:race
                                                                                               AMERICAN IND
## code:factor
                     code:trt01a-Placebo
                                                                             code:trt01a
                                                                                               Placebo
## code:factor
                     code:factor-weightbl
                                                                             code:factor
                                                                                               weightbl
## code:factor
                     code:trt01a-Xanomeline Low Dose
                                                                             code:trt01a
                                                                                               Xanomeline L
## code:factor
                     code:factor- ALL
                                                                             code:factor
                                                                                               ALL
## code:factor
                     code:procedure-percent
                                                                             code:procedure
                                                                                               percent
## code:factor
                     code:agegr1-65-80
                                                                                               65-80
                                                                             code:agegr1
## code:factor
                     code:procedure-min
                                                                             code:procedure
                                                                                               min
                     code:race-_NONMISS_
## code:factor
                                                                             code:race
                                                                                               _NONMISS_
## code:factor
                     code:agegr1-_NONMISS_
                                                                                               _NONMISS_
                                                                             code:agegr1
                                                                                               BLACK OR AFR
## code:factor
                     code:race-BLACK_OR_AFRICAN_AMERICAN
                                                                             code:race
## code:factor
                     code:factor-_NONMISS_
                                                                                               _NONMISS_
                                                                             code:factor
## code:factor
                     code:sex-U
                                                                             code:sex
## code:factor
                     code:procedure-count
                                                                             code:procedure
                                                                                               count
## code:factor
                     code:procedure-std
                                                                             code:procedure
                                                                                               std
## code:trt01a
                     code:factor-quantity
                                                                             code:factor
                                                                                               quantity
```

```
## code:trt01a
                     code:procedure-max
                                                                             code:procedure
                                                                                               max
## code:trt01a
                     code:procedure-q3
                                                                             code:procedure
                                                                                               q3
## code:trt01a
                     code:sex-F
                                                                             code:sex
                                                                                               F
## code:trt01a
                     code:agegr1-_65
                                                                             code:agegr1
                                                                                               <65
## code:trt01a
                     code:factor-proportion
                                                                             code:factor
                                                                                               proportion
## code:trt01a
                     code:agegr1-_80
                                                                                               >80
                                                                             code:agegr1
## code:trt01a
                     code:race- ALL
                                                                             code:race
                                                                                                ALL
## code:trt01a
                     code:procedure-mean
                                                                             code:procedure
                                                                                               mean
                     code:trt01a-_ALL_
                                                                                               _ALL
## code:trt01a
                                                                             code:trt01a
## code:trt01a
                     code:sex-M
                                                                             code:sex
## code:trt01a
                     code:ethnic-HISPANIC_OR_LATINO
                                                                             code:ethnic
                                                                                               HISPANIC OR
## code:trt01a
                                                                                               NATIVE HAWAI
                     code:race-NATIVE_HAWAIIAN_OR_OTHER_PACIFIC_ISLANDER
                                                                             code:race
## code:trt01a
                     code:ethnic-NOT_HISPANIC_OR_LATINO
                                                                             code:ethnic
                                                                                               NOT HISPANIC
## code:trt01a
                     code:procedure-median
                                                                             code:procedure
                                                                                               median
## code:trt01a
                     code:ethnic-_NONMISS_
                                                                             code:ethnic
                                                                                               _NONMISS_
## code:trt01a
                     code:procedure-q1
                                                                             code:procedure
                                                                                               q1
## code:trt01a
                     code:trt01a-Xanomeline_High_Dose
                                                                                               Xanomeline H
                                                                             code:trt01a
## code:trt01a
                     code:agegr1-_ALL_
                                                                             code:agegr1
                                                                                                ALL
## code:trt01a
                    code:sex-UN
                                                                             code:sex
                                                                                               UN
## code:trt01a
                     code:sex- ALL
                                                                             code:sex
                                                                                                ALL
## code:trt01a
                     code:race-ASIAN
                                                                             code:race
                                                                                               ASIAN
## code:trt01a
                     code:race-WHITE
                                                                             code:race
                                                                                               WHITE
## code:trt01a
                     code:trt01a-_NONMISS_
                                                                             code:trt01a
                                                                                                _NONMISS_
## code:trt01a
                     code:sex-_NONMISS_
                                                                                                NONMISS
                                                                             code:sex
## code:trt01a
                     code:factor-age
                                                                             code:factor
                                                                                               age
                     code:ethnic-_ALL_
## code:trt01a
                                                                             code:ethnic
                                                                                               _ALL_
## code:trt01a
                    code:procedure-n
                                                                             code:procedure
## code:trt01a
                     code:race-AMERICAN_INDIAN_OR_ALASKA_NATIVE
                                                                                               AMERICAN IND
                                                                             code:race
## code:trt01a
                     code:trt01a-Placebo
                                                                             code:trt01a
                                                                                               Placebo
## code:trt01a
                    code:factor-weightbl
                                                                             code:factor
                                                                                               weightbl
## code:trt01a
                     code:trt01a-Xanomeline_Low_Dose
                                                                             code:trt01a
                                                                                               Xanomeline L
## code:trt01a
                     code:factor-_ALL_
                                                                             code:factor
                                                                                               _ALL_
## code:trt01a
                     code:procedure-percent
                                                                             code:procedure
                                                                                               percent
## code:trt01a
                     code:agegr1-65-80
                                                                                               65-80
                                                                             code:agegr1
## code:trt01a
                     code:procedure-min
                                                                             code:procedure
                                                                                               min
## code:trt01a
                     code:race-_NONMISS_
                                                                             code:race
                                                                                                _NONMISS_
## code:trt01a
                     code:agegr1- NONMISS
                                                                             code:agegr1
                                                                                                NONMISS
## code:trt01a
                    code:race-BLACK_OR_AFRICAN_AMERICAN
                                                                             code:race
                                                                                               BLACK OR AFR
## code:trt01a
                     code:factor-_NONMISS_
                                                                             code:factor
                                                                                                NONMISS
## code:trt01a
                     code:sex-U
                                                                             code:sex
## code:trt01a
                     code:procedure-count
                                                                             code:procedure
                                                                                               count
## code:trt01a
                     code:procedure-std
                                                                             code:procedure
                                                                                               std
## code:sex
                     code:factor-quantity
                                                                             code:factor
                                                                                               quantity
## code:sex
                    code:procedure-max
                                                                             code:procedure
                                                                                               max
## code:sex
                    code:procedure-q3
                                                                             code:procedure
                                                                                               q3
                                                                                               F
## code:sex
                    code:sex-F
                                                                             code:sex
## code:sex
                     code:agegr1-_65
                                                                             code:agegr1
                                                                                               <65
## code:sex
                     code:factor-proportion
                                                                             code:factor
                                                                                               proportion
## code:sex
                     code:agegr1-_80
                                                                             code:agegr1
                                                                                               >80
## code:sex
                     code:race-_ALL_
                                                                             code:race
                                                                                               _{\mathtt{ALL}}_{\mathtt{}}
## code:sex
                     code:procedure-mean
                                                                             code:procedure
                                                                                               mean
## code:sex
                    code:trt01a- ALL
                                                                             code:trt01a
                                                                                                _ALL_
## code:sex
                    code:sex-M
                                                                             code:sex
                                                                                               М
## code:sex
                                                                                               HISPANIC OR
                     code:ethnic-HISPANIC_OR_LATINO
                                                                             code:ethnic
```

```
## code:sex
                     code:race-NATIVE_HAWAIIAN_OR_OTHER_PACIFIC_ISLANDER
                                                                              code:race
                                                                                               NATIVE HAWAI
## code:sex
                     code:ethnic-NOT HISPANIC OR LATINO
                                                                              code:ethnic
                                                                                               NOT HISPANIC
                                                                              code:procedure
                                                                                               median
## code:sex
                     code:procedure-median
## code:sex
                     code:ethnic-_NONMISS_
                                                                              code:ethnic
                                                                                                _NONMISS_
## code:sex
                     code:procedure-q1
                                                                              code:procedure
                                                                                               q1
## code:sex
                     code:trt01a-Xanomeline High Dose
                                                                              code:trt01a
                                                                                               Xanomeline H
## code:sex
                    code:agegr1- ALL
                                                                              code:agegr1
                                                                                                ALL
## code:sex
                    code:sex-UN
                                                                                               UN
                                                                              code:sex
## code:sex
                    code:sex-_ALL_
                                                                              code:sex
                                                                                                _ALL_
## code:sex
                     code:race-ASIAN
                                                                              code:race
                                                                                               ASIAN
## code:sex
                     code:race-WHITE
                                                                              code:race
                                                                                               WHITE
                    code:trt01a-_NONMISS_
## code:sex
                                                                              code:trt01a
                                                                                                NONMISS
                    code:sex-_NONMISS_
## code:sex
                                                                              code:sex
                                                                                                NONMISS_
## code:sex
                    code:factor-age
                                                                              code:factor
                                                                                               age
## code:sex
                    code:ethnic-_ALL_
                                                                              code:ethnic
                                                                                                _ALL_
## code:sex
                     code:procedure-n
                                                                              code:procedure
## code:sex
                     code:race-AMERICAN_INDIAN_OR_ALASKA_NATIVE
                                                                                               AMERICAN IND
                                                                              code:race
## code:sex
                     code:trt01a-Placebo
                                                                              code:trt01a
                                                                                               Placebo
## code:sex
                    code:factor-weightbl
                                                                              code:factor
                                                                                               weightbl
## code:sex
                     code:trt01a-Xanomeline Low Dose
                                                                              code:trt01a
                                                                                               Xanomeline L
## code:sex
                     code:factor-_ALL_
                                                                              code:factor
                                                                                                _ALL_
## code:sex
                     code:procedure-percent
                                                                              code:procedure
                                                                                               percent
## code:sex
                                                                                               65-80
                    code:agegr1-65-80
                                                                              code:agegr1
## code:sex
                     code:procedure-min
                                                                              code:procedure
                                                                                               min
## code:sex
                     code:race-_NONMISS_
                                                                              code:race
                                                                                                NONMISS
## code:sex
                     code:agegr1- NONMISS
                                                                              code:agegr1
                                                                                                _NONMISS_
## code:sex
                     code:race-BLACK_OR_AFRICAN_AMERICAN
                                                                              code:race
                                                                                               BLACK OR AFR
## code:sex
                    code:factor-_NONMISS_
                                                                                                _NONMISS_
                                                                              code:factor
## code:sex
                    code:sex-U
                                                                              code:sex
## code:sex
                    code:procedure-count
                                                                              code:procedure
                                                                                               count
## code:sex
                     code:procedure-std
                                                                              code:procedure
                                                                                               std
## code:race
                     code:factor-quantity
                                                                              code:factor
                                                                                               quantity
## code:race
                     code:procedure-max
                                                                              code:procedure
                                                                                               max
## code:race
                     code:procedure-q3
                                                                              code:procedure
                                                                                               q3
## code:race
                     code:sex-F
                                                                              code:sex
## code:race
                     code:agegr1-_65
                                                                                               <65
                                                                              code:agegr1
## code:race
                     code:factor-proportion
                                                                              code:factor
                                                                                               proportion
## code:race
                    code:agegr1-_80
                                                                              code:agegr1
                                                                                               >80
## code:race
                     code:race-_ALL_
                                                                              code:race
                                                                                                _ALL_
## code:race
                     code:procedure-mean
                                                                              code:procedure
                                                                                               mean
## code:race
                    code:trt01a- ALL
                                                                              code:trt01a
                                                                                                ALL
## code:race
                    code:sex-M
                                                                              code:sex
## code:race
                     code:ethnic-HISPANIC OR LATINO
                                                                                               HISPANIC OR
                                                                              code:ethnic
## code:race
                    code:race-NATIVE_HAWAIIAN_OR_OTHER_PACIFIC_ISLANDER
                                                                                               NATIVE HAWAI
                                                                              code:race
## code:race
                    code:ethnic-NOT_HISPANIC_OR_LATINO
                                                                                               NOT HISPANIC
                                                                              code:ethnic
## code:race
                    code:procedure-median
                                                                              code:procedure
                                                                                               median
## code:race
                     code:ethnic-_NONMISS_
                                                                              code:ethnic
                                                                                                _NONMISS_
## code:race
                     code:procedure-q1
                                                                              code:procedure
                                                                                               q1
## code:race
                    code:trt01a-Xanomeline_High_Dose
                                                                              code:trt01a
                                                                                               Xanomeline H
## code:race
                     code:agegr1-_ALL_
                                                                              code:agegr1
                                                                                                _{\mathtt{ALL}}_{\mathtt{}}
## code:race
                     code:sex-UN
                                                                                               UN
                                                                              code:sex
## code:race
                    code:sex-_ALL_
                                                                              code:sex
                                                                                                _ALL_
## code:race
                     code:race-ASIAN
                                                                              code:race
                                                                                               ASIAN
                     code:race-WHITE
                                                                                               WHITE
## code:race
                                                                              code:race
```

```
NONMISS
## code:race
                    code:trt01a-_NONMISS_
                                                                           code:trt01a
                    code:sex-_NONMISS_
## code:race
                                                                           code:sex
                                                                                            _NONMISS_
## code:race
                    code:factor-age
                                                                           code:factor
                                                                                            age
                    code:ethnic-_ALL_
## code:race
                                                                           code:ethnic
                                                                                            _ALL_
## code:race
                    code:procedure-n
                                                                           code:procedure
## code:race
                    code:race-AMERICAN INDIAN OR ALASKA NATIVE
                                                                           code:race
                                                                                            AMERICAN IND
                    code:trt01a-Placebo
## code:race
                                                                           code:trt01a
                                                                                            Placebo
## code:race
                    code:factor-weightbl
                                                                           code:factor
                                                                                            weightbl
                    code:trt01a-Xanomeline_Low_Dose
## code:race
                                                                           code:trt01a
                                                                                            Xanomeline L
## code:race
                    code:factor-_ALL_
                                                                           code:factor
                                                                                            _ALL_
## code:race
                    code:procedure-percent
                                                                           code:procedure
                                                                                            percent
                    code:agegr1-65-80
                                                                                            65-80
## code:race
                                                                           code:agegr1
## code:race
                    code:procedure-min
                                                                           code:procedure
                                                                                            min
## code:race
                    code:race-_NONMISS_
                                                                           code:race
                                                                                            {\tt NONMISS}_{\tt}
## code:race
                    code:agegr1-_NONMISS_
                                                                           code:agegr1
                                                                                            _NONMISS_
## code:race
                    code:race-BLACK_OR_AFRICAN_AMERICAN
                                                                           code:race
                                                                                            BLACK OR AFR
                    code:factor-_NONMISS_
                                                                                            _NONMISS
## code:race
                                                                           code:factor
## code:race
                    code:sex-U
                                                                           code:sex
                                                                                            IJ
                    code:procedure-count
## code:race
                                                                           code:procedure
                                                                                            count
## code:race
                    code:procedure-std
                                                                           code:procedure
                                                                                            std
## File /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DEMOdimensions.rq
##
##
## -----
## crnd-dimension:ethnic
## crnd-dimension:race
## crnd-dimension:procedure
## crnd-dimension:agegr1
## crnd-dimension:factor
## crnd-dimension:trt01a
## crnd-dimension:sex
## File /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DEMOfactor-codelist.rq
## [1] 53
##
##
## -----
                            skos:topConceptOf
## code:factor-weightbl
                                                               code:factor
## code:factor-weightbl
                            skos:prefLabel
                                                               weightbl
## code:factor-weightbl
                            skos:inScheme
                                                               code:factor
## code:factor-weightbl
                            rrdfqbcrnd0:R-selectionvalue
                                                               weightbl
## code:factor-weightbl
                            rrdfqbcrnd0:R-selectionoperator
                            rrdfqbcrnd0:DataSetRefD2RQ
## code:factor-weightbl
                                                               rrdfqbcrnd0:ADSL_WEIGHTBL
## code:factor-weightbl
                            rdfs:comment
                                                               Coded values from data source. No reconci
## code:factor-weightbl
                            rdf:type
                                                               skos:Concept
## code:factor-weightbl
                            rdf:type
                                                               code:Factor
## code:factor-age
                            skos:topConceptOf
                                                               code:factor
## code:factor-age
                            skos:prefLabel
                                                               age
                            skos:inScheme
## code:factor-age
                                                               code:factor
## code:factor-age
                            rrdfqbcrnd0:R-selectionvalue
                                                               age
## code:factor-age
                            rrdfqbcrnd0:R-selectionoperator
## code:factor-age
                            rrdfqbcrnd0:DataSetRefD2RQ
                                                               rrdfqbcrnd0:ADSL AGE
```

```
## code:factor-age
                            rdfs:comment
                                                               Coded values from data source. No reconci
## code:factor-age
                            rdf:type
                                                               skos:Concept
## code:factor-age
                            rdf:type
                                                               code:Factor
## code:factor-_ALL_
                            skos:topConceptOf
                                                               code:factor
## code:factor-_ALL_
                            skos:prefLabel
                                                               _ALL_
                            skos:inScheme
## code:factor- ALL
                                                               code:factor
                            rdfs:comment
                                                               NON-CDISC: Represents all codelist category
## code:factor-_ALL_
## code:factor-_ALL_
                            rdf:type
                                                               skos:Concept
## code:factor-_ALL_
                            rdf:type
                                                               code:Factor
## code:factor-quantity
                            skos:topConceptOf
                                                               code:factor
## code:factor-quantity
                            skos:prefLabel
                                                               quantity
## code:factor-quantity
                            skos:inScheme
                                                               code:factor
## code:factor-quantity
                            rrdfqbcrnd0:R-selectionvalue
                                                               quantity
## code:factor-quantity
                            rrdfqbcrnd0:R-selectionoperator
## code:factor-quantity
                                                               Coded values from data source. No reconci
                            rdfs:comment
## code:factor-quantity
                            rdf:type
                                                               skos:Concept
## code:factor-quantity
                            rdf:type
                                                               code:Factor
## code:factor-_NONMISS_
                            skos:topConceptOf
                                                               code:factor
## code:factor-_NONMISS_
                            skos:prefLabel
                                                               _NONMISS_
## code:factor-_NONMISS_
                            skos:inScheme
                                                               code:factor
## code:factor-_NONMISS_
                            rrdfqbcrnd0:R-selectionfunction
                                                               is.na
## code:factor-_NONMISS_
                            rdfs:comment
                                                               NON-CDISC: Represents the non-missing cod
## code:factor-_NONMISS_
                            rdf:type
                                                               skos:Concept
## code:factor-_NONMISS_
                            rdf:type
                                                               code:Factor
## code:factor-proportion
                            skos:topConceptOf
                                                               code:factor
## code:factor-proportion
                            skos:prefLabel
                                                              proportion
## code:factor-proportion
                            skos:inScheme
                                                               code:factor
## code:factor-proportion
                            rrdfqbcrnd0:R-selectionvalue
                                                               proportion
                            rrdfqbcrnd0:R-selectionoperator
## code:factor-proportion
## code:factor-proportion
                            rdfs:comment
                                                               Coded values from data source. No reconci
## code:factor-proportion
                            rdf:type
                                                               skos:Concept
## code:factor-proportion
                            rdf:type
                                                               code:Factor
## code:factor-proportion
                            rdf:type
                                                              rdfs:Resource
## code:factor-_NONMISS_
                                                              rdfs:Resource
                            rdf:type
## code:factor-quantity
                            rdf:type
                                                              rdfs:Resource
## code:factor-_ALL_
                            rdf:type
                                                              rdfs:Resource
## code:factor-age
                            rdf:type
                                                              rdfs:Resource
## code:factor-weightbl
                                                              rdfs:Resource
                            rdf:type
## File /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DEMOfactor.rq
## [1] 6
##
##
## factor
                            prefLabel
                                         DataSetRefD2RQ
                                                                     Rselectionvalue
## -----
## code:factor-_ALL_
                                         NA
                            _ALL_
## code:factor-proportion
                            proportion
                                                                      proportion
## code:factor-weightbl
                            weightbl
                                         rrdfqbcrnd0:ADSL_WEIGHTBL
                                                                      weightbl
## code:factor-_NONMISS_
                            _NONMISS_
                                                                      NA
## code:factor-quantity
                            quantity
                                                                      quantity
                                         rrdfqbcrnd0:ADSL_AGE
## code:factor-age
                            age
                                                                      age
## File /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DEMOobservations-R-data-par
## [1] 2
##
```

##

```
D2RQPropertyBridge
                                                                Rselectionvalue
## -----
             _____
## ds:obs007
             http://www.example.org/datasets/vocab/ADSL_SEX
## ds:obs007 http://www.example.org/datasets/vocab/ADSL_TRT01A
                                                                Placebo
## File /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DEMOobservations-R-data.rq
## [1] 0
## File /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DEMOobservations-R-selection
## [1] 3
##
##
## obs
              rrdfqbcrnd0Rcolumnname
                                      Rselectionoperator
                                                          Rselectionvalue
## -----
                                                           -----
                                      -----
## ds:obs027
              trt01a
                                                           Xanomeline High Dose
## ds:obs056
              trt01a
                                      ==
                                                           Xanomeline Low Dose
## ds:obs056
                                                           65-80
              agegr1
## File /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DEMOobservations.rq
## [1] 132
##
##
## s
              ethnic
                                                  race
                                                                                             proced
## -----
             code:ethnic-_ALL_
                                                                                              code:p
## ds:obs103
                                                  code:race- ALL
## ds:obs014
             code:ethnic-_ALL_
                                                  code:race-_ALL_
                                                                                              code:p
                                                  code:race-AMERICAN INDIAN OR ALASKA NATIVE
## ds:obs089
              code:ethnic-_ALL_
                                                                                              code:p
## ds:obs019
              code:ethnic-_ALL_
                                                  code:race-_ALL_
                                                                                              code:p
## ds:obs031
              code:ethnic-_ALL_
                                                  code:race-_ALL_
                                                                                              code:p
## ds:obs013
              code:ethnic-_ALL_
                                                  code:race-_ALL_
                                                                                              code:p
              code:ethnic-NOT_HISPANIC_OR_LATINO
                                                  code:race-_ALL_
## ds:obs124
                                                                                              code:p
## ds:obs084
                                                  code:race-BLACK_OR_AFRICAN_AMERICAN
              code:ethnic-_ALL_
                                                                                              code:p
## ds:obs129
              code:ethnic-HISPANIC_OR_LATINO
                                                  code:race-_ALL_
                                                                                              code:p
## ds:obs088
              code:ethnic-_ALL_
                                                  code:race-AMERICAN_INDIAN_OR_ALASKA_NATIVE
                                                                                              code:p
## ds:obs041
              code:ethnic-_ALL_
                                                  code:race-_ALL_
                                                                                              code:p
              code:ethnic-NOT_HISPANIC_OR_LATINO
## ds:obs123
                                                  code:race-_ALL_
                                                                                              code:p
## ds:obs094
              code:ethnic-_ALL_
                                                  code:race-_ALL_
                                                                                              code:p
              code:ethnic-_ALL_
## ds:obs098
                                                  code:race-_ALL_
                                                                                              code:p
## ds:obs048
              code:ethnic-_ALL_
                                                  code:race-_ALL_
                                                                                              code:p
## ds:obs093
              code:ethnic- ALL
                                                  code:race- ALL
                                                                                              code:p
## ds:obs097
              code:ethnic-_ALL_
                                                  code:race-_ALL_
                                                                                              code:p
## ds:obs021
                                                                                              code:p
              code:ethnic-_ALL_
                                                  code:race-_ALL_
## ds:obs058
              code:ethnic-_ALL_
                                                  code:race-_ALL_
                                                                                              code:p
## ds:obs132
              code:ethnic-HISPANIC OR LATINO
                                                  code:race- ALL
                                                                                             code:p
## ds:obs027
              code:ethnic-_ALL_
                                                  code:race-\_ALL_
                                                                                              code:p
## ds:obs020
              code:ethnic-_ALL_
                                                  code:race-_ALL_
                                                                                              code:p
## ds:obs056
              code:ethnic-_ALL_
                                                  code:race-_ALL_
                                                                                              code:p
              code:ethnic-HISPANIC_OR_LATINO
## ds:obs130
                                                  code:race-_ALL_
                                                                                              code:p
                                                  code:race-_ALL_
## ds:obs051
              code:ethnic-_ALL_
                                                                                              code:p
              code:ethnic-_ALL_
## ds:obs007
                                                  code:race-_ALL_
                                                                                              code:p
## ds:obs055
              code:ethnic-_ALL_
                                                  code:race-_ALL_
                                                                                              code:p
## ds:obs076
              code:ethnic-_ALL_
                                                  code:race-WHITE
                                                                                              code:p
## ds:obs117
              code:ethnic-_NONMISS_
                                                  code:race-_ALL_
                                                                                              code:p
## ds:obs072
              code:ethnic-_ALL_
                                                  code:race-_NONMISS_
                                                                                              code:p
## ds:obs001
              code:ethnic- ALL
                                                  code:race-_ALL_
                                                                                              code:p
## ds:obs026
              code:ethnic-_ALL_
                                                  code:race-_ALL_
                                                                                              code:p
## ds:obs006
              code:ethnic-_ALL_
                                                  code:race-_ALL_
                                                                                              code:p
```

```
## ds:obs106
               code:ethnic-_ALL_
                                                     code:race-_ALL_
                                                                                                    code:p
## ds:obs061
               code:ethnic-_ALL_
                                                     code:race-_ALL_
                                                                                                    code:p
## ds:obs065
               code:ethnic- ALL
                                                     code:race- ALL
                                                                                                    code:p
## ds:obs111
               code:ethnic-_ALL_
                                                     code:race-_ALL_
                                                                                                    code:p
## ds:obs071
               code:ethnic-_ALL_
                                                     code:race-_NONMISS_
                                                                                                    code:p
## ds:obs116
               code:ethnic- NONMISS
                                                     code:race- ALL
                                                                                                    code:p
## ds:obs075
               code:ethnic- ALL
                                                     code:race-WHITE
                                                                                                    code:p
## ds:obs100
               code:ethnic- ALL
                                                     code:race- ALL
                                                                                                    code:p
## ds:obs105
               code:ethnic-_ALL_
                                                     code:race-_ALL_
                                                                                                    code:p
## ds:obs060
               code:ethnic-_ALL_
                                                     code:race-_ALL_
                                                                                                    code:p
## ds:obs016
               code:ethnic-_ALL_
                                                     code:race-_ALL_
                                                                                                    code:p
               code:ethnic-_ALL_
                                                     code:race-_ALL_
## ds:obs064
                                                                                                    code:p
## ds:obs036
               code:ethnic-_ALL_
                                                     code:race-_ALL_
                                                                                                    code:p
               code:ethnic-_ALL_
## ds:obs110
                                                     code:race-_ALL_
                                                                                                    code:p
## ds:obs126
               code:ethnic-NOT_HISPANIC_OR_LATINO
                                                     code:race-_ALL_
                                                                                                    code:p
## ds:obs081
               code:ethnic-_ALL_
                                                     code:race-BLACK_OR_AFRICAN_AMERICAN
                                                                                                    code:p
## ds:obs010
               code:ethnic-_ALL_
                                                     code:race-_ALL_
                                                                                                    code:p
## ds:obs085
               code:ethnic- ALL
                                                     code:race-AMERICAN_INDIAN_OR_ALASKA_NATIVE
                                                                                                    code:p
               code:ethnic-_ALL_
## ds:obs035
                                                     code:race-_ALL_
                                                                                                    code:p
## ds:obs120
               code:ethnic-_NONMISS_
                                                     code:race-_ALL_
                                                                                                    code:p
## ds:obs080
               code:ethnic-_ALL_
                                                     code:race-BLACK_OR_AFRICAN_AMERICAN
                                                                                                    code:p
## ds:obs033
               code:ethnic-_ALL_
                                                     code:race- ALL
                                                                                                    code:p
               code:ethnic-_ALL_
                                                     code:race-AMERICAN_INDIAN_OR_ALASKA_NATIVE
## ds:obs090
                                                                                                    code:p
## ds:obs015
               code:ethnic-_ALL_
                                                     code:race-_ALL_
                                                                                                    code:p
## ds:obs043
               code:ethnic- ALL
                                                     code:race- ALL
                                                                                                    code:p
## ds:obs125
               code:ethnic-NOT_HISPANIC_OR_LATINO
                                                     code:race-_ALL_
                                                                                                    code:p
               code:ethnic-_ALL_
                                                     code:race-_ALL_
## ds:obs042
                                                                                                    code:p
## ds:obs095
               code:ethnic-_ALL_
                                                     code:race-_ALL_
                                                                                                    code:p
## ds:obs099
               code:ethnic-_ALL_
                                                     code:race-_ALL_
                                                                                                    code:p
                                                     code:race-_ALL_
## ds:obs052
               code:ethnic-_ALL_
                                                                                                    code:p
## ds:obs029
               code:ethnic-_ALL_
                                                     code:race-_ALL_
                                                                                                    code:p
## ds:obs023
               code:ethnic-_ALL_
                                                     code:race-_ALL_
                                                                                                    code:p
## ds:obs059
               code:ethnic-_ALL_
                                                     code:race-_ALL_
                                                                                                    code:p
## ds:obs028
               code:ethnic-_ALL_
                                                     code:race-_ALL_
                                                                                                    code:p
               code:ethnic-_ALL_
                                                     code:race-_ALL_
## ds:obs022
                                                                                                    code:p
               code:ethnic-_ALL_
## ds:obs009
                                                     code:race-_ALL_
                                                                                                    code:p
## ds:obs057
               code:ethnic- ALL
                                                     code:race- ALL
                                                                                                    code:p
## ds:obs038
               code:ethnic-_ALL_
                                                     code:race-_ALL_
                                                                                                    code:p
               code:ethnic-_ALL_
## ds:obs003
                                                     code:race-_ALL_
                                                                                                    code:p
## ds:obs119
               code:ethnic-_NONMISS_
                                                     code:race-_ALL_
                                                                                                    code:p
## ds:obs078
               code:ethnic- ALL
                                                     code:race-WHITE
                                                                                                    code:p
               code:ethnic-_ALL_
## ds:obs008
                                                     code:race- ALL
                                                                                                    code:p
## ds:obs108
               code:ethnic-_ALL_
                                                     code:race-_ALL_
                                                                                                    code:p
               code:ethnic-_NONMISS_
                                                     code:race-_ALL_
## ds:obs118
                                                                                                    code:p
## ds:obs067
               code:ethnic-_ALL_
                                                     code:race-_NONMISS_
                                                                                                    code:p
               code:ethnic-_ALL_
                                                     code:race-_ALL_
## ds:obs018
                                                                                                    code:p
## ds:obs113
               code:ethnic-_ALL_
                                                     code:race-_ALL_
                                                                                                    code:p
## ds:obs073
               code:ethnic-_ALL_
                                                     code:race-WHITE
                                                                                                    code:p
               code:ethnic-_ALL_
## ds:obs002
                                                     code:race-_ALL_
                                                                                                    code:p
## ds:obs102
               code:ethnic-_ALL_
                                                     code:race-_ALL_
                                                                                                    code:p
## ds:obs077
               code:ethnic-_ALL_
                                                     code:race-WHITE
                                                                                                    code:p
## ds:obs107
               code:ethnic- ALL
                                                     code:race-_ALL_
                                                                                                    code:p
## ds:obs062
               code:ethnic-_ALL_
                                                     code:race-_ALL_
                                                                                                    code:p
## ds:obs030
               code:ethnic-_ALL_
                                                     code:race-_ALL_
                                                                                                    code:p
```

```
## ds:obs066
               code:ethnic-_ALL_
                                                    code:race-_ALL_
                                                                                                  code:p
## ds:obs112
               code:ethnic-_ALL_
                                                    code:race-_ALL_
                                                                                                  code:p
## ds:obs128
               code:ethnic-HISPANIC OR LATINO
                                                    code:race- ALL
                                                                                                  code:p
## ds:obs083
               code:ethnic-_ALL_
                                                    code:race-BLACK_OR_AFRICAN_AMERICAN
                                                                                                  code:p
## ds:obs101
               code:ethnic-_ALL_
                                                    code:race-_ALL_
                                                                                                  code:p
## ds:obs012
               code:ethnic- ALL
                                                    code:race- ALL
                                                                                                  code:p
## ds:obs017
               code:ethnic- ALL
                                                    code:race- ALL
                                                                                                  code:p
               code:ethnic-_ALL_
## ds:obs087
                                                    code:race-AMERICAN_INDIAN_OR_ALASKA_NATIVE
                                                                                                  code:p
## ds:obs037
               code:ethnic-_ALL_
                                                    code:race-_ALL_
                                                                                                  code:p
## ds:obs122
               code:ethnic-NOT_HISPANIC_OR_LATINO
                                                    code:race-_ALL_
                                                                                                  code:p
## ds:obs127
               code:ethnic-HISPANIC_OR_LATINO
                                                    code:race-_ALL_
                                                                                                  code:p
## ds:obs011
               code:ethnic-_ALL_
                                                    code:race-_ALL_
                                                                                                  code:p
               code:ethnic-_ALL_
## ds:obs082
                                                    code:race-BLACK_OR_AFRICAN_AMERICAN
                                                                                                  code:p
                                                                                                  code:p
## ds:obs086
               code:ethnic-_ALL_
                                                    code:race-AMERICAN_INDIAN_OR_ALASKA_NATIVE
## ds:obs047
               code:ethnic-_ALL_
                                                    code:race-_ALL_
                                                                                                  code:p
## ds:obs121
               code:ethnic-NOT_HISPANIC_OR_LATINO
                                                     code:race-_ALL_
                                                                                                  code:p
## ds:obs092
               code:ethnic-_ALL_
                                                    code:race-_ALL_
                                                                                                  code:p
## ds:obs096
               code:ethnic- ALL
                                                    code:race- ALL
                                                                                                  code:p
## ds:obs046
               code:ethnic-_ALL_
                                                    code:race-_ALL_
                                                                                                  code:p
## ds:obs045
               code:ethnic-_ALL_
                                                    code:race-_ALL_
                                                                                                  code:p
## ds:obs131
               code:ethnic-HISPANIC_OR_LATINO
                                                    code:race-_ALL_
                                                                                                  code:p
## ds:obs091
               \verb|code:ethnic-_ALL||
                                                    code:race-_ALL_
                                                                                                  code:p
## ds:obs040
               code:ethnic-_ALL_
                                                    code:race-_ALL_
                                                                                                  code:p
## ds:obs044
               code:ethnic-_ALL_
                                                    code:race-_ALL_
                                                                                                  code:p
## ds:obs050
               code:ethnic-_ALL_
                                                    code:race- ALL
                                                                                                  code:p
## ds:obs054
               code:ethnic-_ALL_
                                                    code:race-_ALL_
                                                                                                  code:p
## ds:obs005
               code:ethnic-_ALL_
                                                    code:race-_ALL_
                                                                                                  code:p
## ds:obs053
               code:ethnic-_ALL_
                                                    code:race-_ALL_
                                                                                                  code:p
## ds:obs025
               code:ethnic-_ALL_
                                                    code:race-_ALL_
                                                                                                  code:p
## ds:obs115
               code:ethnic-_NONMISS_
                                                    code:race-_ALL_
                                                                                                  code:p
## ds:obs070
               code:ethnic-_ALL_
                                                    code:race-_NONMISS_
                                                                                                  code:p
## ds:obs074
               code:ethnic-_ALL_
                                                    code:race-WHITE
                                                                                                  code:p
## ds:obs104
               code:ethnic-_ALL_
                                                    code:race-_ALL_
                                                                                                  code:p
               code:ethnic-_ALL_
## ds:obs024
                                                    code:race-_ALL_
                                                                                                  code:p
               code:ethnic-_ALL_
## ds:obs063
                                                    code:race-_ALL_
                                                                                                  code:p
## ds:obs034
               code:ethnic-_ALL_
                                                    code:race-_ALL_
                                                                                                  code:p
## ds:obs039
               code:ethnic- ALL
                                                    code:race- ALL
                                                                                                  code:p
## ds:obs069
               code:ethnic-_ALL_
                                                    code:race-_NONMISS_
                                                                                                  code:p
                                                    code:race-_ALL_
## ds:obs004
               code:ethnic-_ALL_
                                                                                                  code:p
## ds:obs079
                                                    code:race-BLACK_OR_AFRICAN_AMERICAN
               code:ethnic-_ALL_
                                                                                                  code:p
## ds:obs109
                                                                                                  code:p
               code:ethnic- ALL
                                                    code:race- ALL
               code:ethnic-_ALL_
## ds:obs068
                                                    code:race-_NONMISS_
                                                                                                  code:p
                                                                                                  code:p
## ds:obs032
               code:ethnic-_ALL_
                                                    code:race-_ALL_
## ds:obs049
               code:ethnic-_ALL_
                                                    code:race-_ALL_
                                                                                                  code:p
## ds:obs114
               code:ethnic-_ALL_
                                                    code:race-_ALL_
                                                                                                  code:p
## File /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DEMOprocedure-codelist.rq
## [1] 100
##
##
## s
## -----
## code:procedure-min
                            skos:topConceptOf
                                                              code:procedure
## code:procedure-min
                            skos:prefLabel
                                                              min
## code:procedure-min
                            skos:inScheme
                                                              code:procedure
```

```
## code:procedure-min
                             rrdfqbcrnd0:RdescStatDefFun
                                                                function (x) {
                                                                                    min(x, na.rm = TRUE)
## code:procedure-min
                             rrdfqbcrnd0:R-selectionvalue
                                                                min
## code:procedure-min
                             rrdfqbcrnd0:R-selectionoperator
                             rdfs:comment
## code:procedure-min
                                                                Descriptive statistics min
## code:procedure-min
                             rdf:type
                                                                skos:Concept
## code:procedure-min
                                                                code:Procedure
                             rdf:type
                                                                code:procedure
## code:procedure-std
                             skos:topConceptOf
## code:procedure-std
                             skos:prefLabel
                                                                std
## code:procedure-std
                             skos:inScheme
                                                                code:procedure
## code:procedure-std
                             rrdfqbcrnd0:RdescStatDefFun
                                                                function (x) {
                                                                                     sd(x, na.rm = TRUE) }
## code:procedure-std
                             rrdfqbcrnd0:R-selectionvalue
## code:procedure-std
                             rrdfqbcrnd0:R-selectionoperator
## code:procedure-std
                             rdfs:comment
                                                                Descriptive statistics std
                             rdf:type
## code:procedure-std
                                                                skos:Concept
## code:procedure-std
                                                                code:Procedure
                             rdf:type
## code:procedure-q3
                             skos:topConceptOf
                                                                code:procedure
## code:procedure-q3
                             skos:prefLabel
                                                                q3
## code:procedure-q3
                             skos:inScheme
                                                                code:procedure
## code:procedure-q3
                             rrdfqbcrnd0:RdescStatDefFun
                                                                function (x) {
                                                                                    quantile(x, probs = c
## code:procedure-q3
                             rrdfqbcrnd0:R-selectionvalue
## code:procedure-q3
                             rrdfqbcrnd0:R-selectionoperator
## code:procedure-q3
                             rdfs:comment
                                                                Descriptive statistics q3
## code:procedure-q3
                             rdf:type
                                                                skos:Concept
## code:procedure-q3
                                                                code:Procedure
                             rdf:type
## code:procedure-median
                             skos:topConceptOf
                                                                code:procedure
## code:procedure-median
                             skos:prefLabel
                                                                median
## code:procedure-median
                             skos:inScheme
                                                                code:procedure
## code:procedure-median
                             rrdfqbcrnd0:RdescStatDefFun
                                                                function (x) {
                                                                                    median(x, na.rm = TRU)
## code:procedure-median
                             rrdfqbcrnd0:R-selectionvalue
                                                                median
## code:procedure-median
                             rrdfqbcrnd0:R-selectionoperator
## code:procedure-median
                             rdfs:comment
                                                                Descriptive statistics median
                             rdf:type
## code:procedure-median
                                                                skos:Concept
## code:procedure-median
                             rdf:type
                                                                code:Procedure
                             skos:topConceptOf
## code:procedure-count
                                                                code:procedure
## code:procedure-count
                             skos:prefLabel
                                                                count
                             skos:inScheme
## code:procedure-count
                                                                code:procedure
## code:procedure-count
                             rrdfqbcrnd0:RdescStatDefFun
                                                                function (x) {
                                                                                     length(x) }
## code:procedure-count
                             rrdfqbcrnd0:R-selectionvalue
                                                                count
## code:procedure-count
                             rrdfqbcrnd0:R-selectionoperator
## code:procedure-count
                             rdfs:comment
                                                                Descriptive statistics count
## code:procedure-count
                                                                skos:Concept
                             rdf:type
## code:procedure-count
                             rdf:type
                                                                code:Procedure
                             skos:topConceptOf
## code:procedure-max
                                                                code:procedure
## code:procedure-max
                             skos:prefLabel
                                                                max
## code:procedure-max
                             skos:inScheme
                                                                code:procedure
## code:procedure-max
                             rrdfqbcrnd0:RdescStatDefFun
                                                                function (x) {
                                                                                    max(x, na.rm = TRUE)
## code:procedure-max
                             rrdfqbcrnd0:R-selectionvalue
                                                                max
## code:procedure-max
                             rrdfqbcrnd0:R-selectionoperator
## code:procedure-max
                             rdfs:comment
                                                                Descriptive statistics max
## code:procedure-max
                             rdf:type
                                                                skos:Concept
## code:procedure-max
                             rdf:type
                                                                code:Procedure
## code:procedure-mean
                             skos:topConceptOf
                                                                code:procedure
## code:procedure-mean
                             skos:prefLabel
                                                                mean
```

code:procedure

skos:inScheme

## code:procedure-mean

```
## code:procedure-mean
                             rrdfqbcrnd0:RdescStatDefFun
                                                                function (x) {
                                                                                    mean(x, na.rm = TRUE)
## code:procedure-mean
                             rrdfqbcrnd0:R-selectionvalue
                                                                mean
## code:procedure-mean
                             rrdfqbcrnd0:R-selectionoperator
                             rdfs:comment
## code:procedure-mean
                                                                Descriptive statistics mean
## code:procedure-mean
                             rdf:type
                                                                skos:Concept
## code:procedure-mean
                                                                code:Procedure
                             rdf:type
                                                               code:procedure
## code:procedure-q1
                             skos:topConceptOf
## code:procedure-q1
                             skos:prefLabel
## code:procedure-q1
                             skos:inScheme
                                                                code:procedure
## code:procedure-q1
                             rrdfqbcrnd0:RdescStatDefFun
                                                                function (x) {
                                                                                    quantile(x, probs = c
## code:procedure-q1
                             rrdfqbcrnd0:R-selectionvalue
## code:procedure-q1
                             rrdfqbcrnd0:R-selectionoperator
## code:procedure-q1
                             rdfs:comment
                                                                Descriptive statistics q1
## code:procedure-q1
                             rdf:type
                                                                skos:Concept
## code:procedure-q1
                                                                code:Procedure
                             rdf:type
## code:procedure-n
                             skos:topConceptOf
                                                                code:procedure
## code:procedure-n
                             skos:prefLabel
## code:procedure-n
                             skos:inScheme
                                                                code:procedure
                            rrdfqbcrnd0:RdescStatDefFun
                                                                function (x) {
                                                                                    length(x[!is.na(x)])
## code:procedure-n
## code:procedure-n
                             rrdfqbcrnd0:R-selectionvalue
## code:procedure-n
                             rrdfqbcrnd0:R-selectionoperator
## code:procedure-n
                             rdfs:comment
                                                                Descriptive statistics n
## code:procedure-n
                                                                skos:Concept
                             rdf:type
## code:procedure-n
                                                                code:Procedure
                             rdf:type
## code:procedure-percent
                             skos:topConceptOf
                                                                code:procedure
## code:procedure-percent
                             skos:prefLabel
                                                                percent
## code:procedure-percent
                             skos:inScheme
                                                                code:procedure
## code:procedure-percent
                             rrdfqbcrnd0:RdescStatDefFun
                                                                function (x) {
                                                                                    -1 }
## code:procedure-percent
                             rrdfqbcrnd0:R-selectionvalue
                                                                percent
## code:procedure-percent
                            rrdfqbcrnd0:R-selectionoperator
## code:procedure-percent
                             rdfs:comment
                                                                Descriptive statistics percent
## code:procedure-percent
                             rdf:type
                                                                skos:Concept
## code:procedure-percent
                             rdf:type
                                                                code:Procedure
## code:procedure-q3
                                                                rdfs:Resource
                             rdf:type
## code:procedure-mean
                             rdf:type
                                                                rdfs:Resource
## code:procedure-q1
                                                                rdfs:Resource
                            rdf:type
## code:procedure-std
                            rdf:type
                                                               rdfs:Resource
## code:procedure-count
                                                                rdfs:Resource
                            rdf:type
## code:procedure-median
                             rdf:type
                                                                rdfs:Resource
## code:procedure-percent
                             rdf:type
                                                                rdfs:Resource
## code:procedure-min
                             rdf:type
                                                                rdfs:Resource
## code:procedure-max
                             rdf:type
                                                                rdfs:Resource
## code:procedure-n
                            rdf:type
                                                                rdfs:Resource
## File /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DEMOprocedure-median.rq
## [1] 10
##
##
## s
## code:procedure-median
                           skos:topConceptOf
                                                               code:procedure
## code:procedure-median
                           skos:prefLabel
                                                              median
## code:procedure-median
                           skos:inScheme
                                                               code:procedure
## code:procedure-median
                           rrdfqbcrnd0:RdescStatDefFun
                                                               function (x) {
                                                                                   median(x, na.rm = TRUE
```

median

rrdfqbcrnd0:R-selectionvalue

## code:procedure-median

```
## code:procedure-median
                          rrdfqbcrnd0:R-selectionoperator
## code:procedure-median
                          rdfs:comment
                                                             Descriptive statistics median
## code:procedure-median
                           rdf:type
                                                             skos:Concept
## code:procedure-median
                                                             code:Procedure
                           rdf:type
## code:procedure-median
                          rdf:type
                                                             rdfs:Resource
## File /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DEMOprocedure.rq
##
##
## procedure
                            prefLabel
                                        functiondef
                                        function (x) {
                                                            max(x, na.rm = TRUE) }
## code:procedure-max
                            max
## code:procedure-std
                            std
                                       function (x) {
                                                            sd(x, na.rm = TRUE) }
## code:procedure-mean
                                       function (x) {
                                                            mean(x, na.rm = TRUE) }
                           mean
## code:procedure-min
                                       function (x) {
                                                            min(x, na.rm = TRUE) }
                           min
## code:procedure-percent
                                       function (x) {
                                                            -1 }
                            percent
## code:procedure-count
                                       function (x) {
                                                            length(x) }
                            count
## code:procedure-q3
                            q3
                                       function (x) {
                                                            quantile(x, probs = c(0.75), na.rm = TRUE)
                                       function (x) {
## code:procedure-n
                                                            length(x[!is.na(x)]) }
                           n
## code:procedure-median
                           median
                                       function (x) {
                                                            median(x, na.rm = TRUE) }
## code:procedure-q1
                                       function (x) {
                                                            quantile(x, probs = c(0.25), na.rm = TRUE)
                            q1
```

### This works do not change

```
dsdName<- GetDsdNameFromCube( store )
domainName<- GetDomainNameFromCube( store )
cat("dsdName ", dsdName, ", domainName ", domainName, "\n" )</pre>
```

## dsdName dsd-DEMO, domainName DEMO

```
forsparqlprefix<- GetForSparqlPrefix( domainName )
cat(forsparqlprefix,"\n")</pre>
```

```
## 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: <a href="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 qb: <http://purl.org/linked-data/cube#>
## prefix pav: <http://purl.org/pav>
## prefix dct: <http://purl.org/dc/terms/>
## prefix mms: <http://rdf.cdisc.org/mms#>
## prefix cts: <http://rdf.cdisc.org/ct/schema#>
## prefix qb: <http://purl.org/linked-data/cube#>
## prefix rrdfqbcrnd0: <http://www.example.org/rrdfqbcrnd0/>
## prefix code: <a href="http://www.example.org/dc/code/">http://www.example.org/dc/code/</a>
## prefix dccs: <http://www.example.org/dc/demo/dccs/>
## prefix ds: <http://www.example.org/dc/demo/ds/>
## prefix crnd-dimension: <a href="http://www.example.org/dc/dimension">http://www.example.org/dc/dimension</a>
```

```
## prefix crnd-attribute: <http://www.example.org/dc/attribute#>
## prefix crnd-measure: <http://www.example.org/dc/measure#>
##
```

$\mathbf{S}$	p	0
ds:obs114 ds:obs114 ds:obs114 ds:obs114 ds:obs114 ds:obs114	crnd-dimension:factor crnd-dimension:trt01a crnd-dimension:sex crnd-dimension:ethnic crnd-dimension:procedure crnd-dimension:race crnd-dimension:agegr1	code:factor-weightbl code:trt01a-Xanomeline_High_Dose code:sex- $ALL$ code:ethnic- $ALL$ code:procedure-min code:race- $ALL$ code:agegr1- $ALL$

# Getting triples with information of object if literal

```
cons.rq<- paste( forsparqlprefix,
,
construct { ?s ?p ?o }
where {
    ?s ?p ?o .
BIND( datatype(?o) as ?datatype )
BIND( isLiteral(?o) as ?isLiteral )
BIND( lang(?o) as ?lang )
values (?s) {
    (ds:obs114)
}
}
',
"\n"
)</pre>
```

```
save.rdf(construct.rdf( store, cons.rq) , file.path(tempdir(), "rapperin.ttl"), "TURTLE")

## [1] "/tmp/RtmpGiwmcL/rapperin.ttl"

To see dot code generated by rapper:

rapper -i turtle -o dot /tmp/Rtmpcccgdg/rapperin.ttl

To display the dot code

rapper -i turtle -o dot /tmp/Rtmpcccgdg/rapperin.ttl | dot -x -Tpdf -ograph.pdf
```

See also (http://www.bioconductor.org/packages/release/bioc/vignettes/Rgraphviz/inst/doc/Rgraphviz.pdf) for Rgraphviz package - may be used to display graphs.

ToDo(MJA): move this to another package - is more an example of R code for making Rgraphvis statement

```
rq<- paste( forsparqlprefix,</pre>
where {
BIND( datatype(?o) as ?datatype )
BIND( isLiteral(?o) as ?isLiteral )
BIND( lang(?o) as ?lang )
(ds:obs114)
res<- sparql.rdf(store, rq)</pre>
knitr::kable(res)
dimnames(res)
allIRI<- c( res[,1],res[,2])
uallIRI<- unique(allIRI)</pre>
L<- list()</pre>
for (i in 1:length(uallIRI) ) {
L[[ uallIRI[i] ]] <- paste( "L", i, sep="" )</pre>
rowcols<- cbind( as.matrix(apply(res[,1:2],c(1,2),function(x) as.character(L[[x]] ))),as.matrix(res[,3]
cat(paste(rowcols, sep=", "),"\n")
```

# Check the statistics

 $\operatorname{ToDo}(\operatorname{MJA}):$  move this to another package - may be the check package

stmtSQL<- GetSQLFromCube(store)
cat(stmtSQL\$summStatSQL)</pre>