Notes on RNMGraphics

Mango Solutions

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This set of notes is a brief overview of the RNMGraphics package. At the moment (version 4.0-x), these are quite terse, but will be expanded upon in later releases. This is meant to give only a basic idea of how the package works.

1 > require(RNMGraphics)

¹ Full path to configuration file:

² D:/R/R-3.0.2/library/RNMImport/configdata/NONMEM2_Variables.csv

All of the plot functions have the prefixes "nm". The current package includes:

- **nmACPlot** plots a given variable in a data set against itself "lagged" by one time step.
- **nmBarChart** generates a categorical barchart of a set of categorical variables against another one.
- nmBoxPlot creates a boxplot of continuous variables against factor variables.
- **nmDotPlot** create a custom dotplot of one or more continuous variables against a categorical variable.
- nmHistogram creates histograms of one or more NONMEM variables.
- **nmQQNorm** generates a qq-plot (for the normal distribution) from one or more NONMEM variables.
- **nmScatterMatrix** generates a scatterplot matrix of a set of variables from a PK/PD dataset.
- nmScatterPlot generates a set of scatter plots with features that are tailored for PK/PD data generated by NONMEM.

They can plot basic objects such as data.frame. For example:

Moreover, each function can plot NMRun and NMProblem objects generated from RNMImport package. For example:



1 > nmBarChart(mtcars, xVars = "cyl", yVars = "gear", bVars = "vs")

Figure 1: nmBarChart for data.frame

```
1 > run1 <- importNm("TestData1.ctl", path =
2 + system.file("unittests", "testdata", "TestRun",
3 + package = "RNMGraphics") )
4 > class(run1)
```

```
1 [1] "NMRun"
2 attr(,"package")
3 [1] "RNMImport"
```

```
1 > timeEventSPlot(run1, title = "Time/event", xLab = "Time",
2 + yLab = "Concentration", subjectNum = 2:4)
```



Figure 2: timeEventSPlot for NMRun object