Simultaneous inference in longitudinal settings: Examples using package `SimLongi`

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1 Introduction

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2 Comparisons among treatment groups per time point

```
library(SimLongi)
```

3 Comparisons among time points per treatment group

4 Comparing

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```
data(brady)
# Fixed-effects model
Fix <- SimLongi(data = brady, response = "logConc", group = "Drug", time = "Time",
    id = "ID", var = list("hett", "het"), cor = list("AR1", "UN"), direction = "gpt",
    type = "Dunnett", base = 3, df = "adj")
# Mixed-effects model
Mix <- SimLongiMix(data = brady, response = "logConc", group = "Drug", time = "Time",
    id = "ID", rand = list("time|id"), direction = "gpt", type = "Dunnett",
    base = 3, df = "kr")
# Multiple marginal models
MMM <- SimLongiMMM(data = brady, response = "logConc", group = "Drug", time = "Time",
    id = "ID", type = "Dunnett", base = 3, refdist = "t")
# SCI plot
PlotCI(list(Fixed = Fix, Mixed = Mix, `Multiple Marginals` = MMM), title = NULL)
```