

Package ‘caffsim’

February 28, 2017

Title Monte Carlo Simulation of Plasma Caffeine Concentrations by Using Population Pharmacokinetic Model

Version 0.1.0

Date 2017-02-27

Description Comparing CRF and data dictionary for now.

Depends R (>= 3.3.2)

Encoding UTF-8

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LazyData true

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Imports mgcv, dplyr

NeedsCompilation no

URL <https://github.com/asancpt/caffsim>

BugReports <https://github.com/asancpt/caffsim/issues>

RoxygenNote 6.0.1

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Dataset	<i>Create a dataset for simulation of single dose of caffeine</i>
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Description

Dataset will create a dataset for simulation of single dose of caffeine

Usage

Dataset(Weight, Dose, N)

Arguments

Weight	Body weight (kg)
Dose	Dose of single caffeine (mg)
N	The number of simulated subjects

Value

The dataset of pharmacokinetic parameters of subjects after single caffeine dose following multivariate normal

See Also

<http://asancpt.github.io/CaffeineEdison>

Examples

```
Dataset(Weight = 20, Dose = 200, N = 20)
Dataset(20, 500)
```

DatasetMulti

Create a dataset for simulation of multiple dose of caffeine

Description

DatasetMulti will create a dataset for simulation of multiple dose of caffeine

Usage

```
DatasetMulti(Weight, Dose, N = 20, Tau = 24)
```

Arguments

Weight	Body weight (kg)
Dose	Dose of multiple caffeine (mg)
N	The number of simulated subjects
Tau	The interval of multiple dosing (hour)

Value

The dataset of pharmacokinetic parameters of subjects after multiple caffeine dose following multivariate normal

See Also

<http://asancpt.github.io/CaffeineEdison>

Examples

```
DatasetMulti(Weight = 20, Dose = 200, N = 20, Tau = 8)
DatasetMulti(20, 500)
```

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