Package ‘modest’

November 16, 2017

Title  Model-Based Dose-Escalation Trials
Version  0.3-1
Date  2017-11-03
Description  User-friendly Shiny apps for designing and evaluating phase I cancer clinical trials, with the aim to estimate the maximum tolerated dose (MTD) of a novel drug, using a Bayesian decision procedure based on logistic regression.
License  GPL-2
Imports  knitr, r handsontable, shiny, shinyBS
VignetteBuilder  knitr
BugReports  https://github.com/PhilippPallmann/modest/issues/
NeedsCompilation  no
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Repository  CRAN
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Description

A user-friendly tool to design and evaluate phase I cancer clinical trials, with the aim to estimate the maximum tolerated dose (MTD) of a novel drug. This is a point-and-click implementation of the dose-escalation study design proposed by Zhou & Whitehead (2003) that uses a Bayesian logistic regression method. The graphical user interfaces (GUIs) are based on R’s Shiny system.
Usage

```r
design()
conduct()
```

Details

This package contains two separate modules:

1) The `design()` module allows to investigate different design options and parameters, and to simulate their operating characteristics under various scenarios. Type `design()` and the GUI will open in a browser window.

2) The `conduct()` module provides guidance for dose selection throughout the study, and a recommendation for the MTD at the end. Type `conduct()` and the GUI will open in a browser window.

Both modules generate a variety of graphs to visualise data and design properties, and create downloadable PDF reports of simulation results and study data analyses.

Author(s)

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References


Examples

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