Package: drugDemand (via r-universe)

Type Package

Title Drug Demand Forecasting

Version 0.1.3

Date 2024-02-27

Description Performs drug demand forecasting by modeling drug dispensing data while taking into account predicted enrollment and treatment discontinuation dates. The gap time between randomization and the first drug dispensing visit is modeled using interval-censored exponential, Weibull, log-logistic, or log-normal distributions (Anderson-Bergman (2017) <doi:10.18637/jss.v081.i12>). The number of skipped visits is modeled using Poisson, zero-inflated Poisson, or negative binomial distributions (Zeileis, Kleiber & Jackman (2008) <doi:10.18637/jss.v027.i08>). The gap time between two consecutive drug dispensing visits given the number of skipped visits is modeled using linear regression based on least squares or least absolute deviations (Birkes & Dodge (1993, ISBN:0-471-56881-3)). The number of dispensed doses is modeled using linear or linear mixed-effects models (McCulloch & Searle (2001, ISBN:0-471-19364-X)).

License GPL (>= 2)

Imports Rcpp (>= 1.0.10), dplyr (>= 1.1.0), rlang (>= 1.1.0), purrr (>= 1.0.2), stringr (>= 1.4.0), plotly (>= 4.10.1), survival (>= 2.41-3), mvtnorm (>= 1.1-3), erify (>= 0.4.0), stats (>= 3.5.0), MASS (>= 7.3-54), nlme (>= 3.1-153), L1pack (>= 0.41-24), eventPred (>= 0.2.3), parallel (>= 4.1.2), foreach (>= 1.5.2), doParallel (>= 1.0.17), doRNG (>= 1.8.6)

LinkingTo Rcpp

Depends R (>= 3.5.0)

LazyData true

RoxygenNote 7.3.0

Roxygen list(markdown = TRUE)

Encoding UTF-8

NeedsCompilation yes

Repository https://kaifenglu.r-universe.dev

RemoteUrl https://github.com/kaifenglu/drugdemand

RemoteRef HEAD

RemoteSha 9ccfcbc0d55bfb9a630c084ecdb3b18c9ee28652