

Package ‘mod.building’

July 7, 2021

Type Package

Title Multivariable Model-building for Cox Regression Model

Version 0.1.0

Author Hyunsoo Hwang

Maintainer Hyunsoo Hwang <ilsanjoa@gmail.com>

Description The function performs a multivariable model-building for Cox regression based on likelihood-ratio test (LRT) p-value

License GPL-3

Encoding UTF-8

LazyData true

Imports survival

RoxygenNote 7.1.1

R topics documented:

lr.surv.pval	1
surv.pval	2
Index	3

lr.surv.pval	<i>P values calculation in The multivariable Cox model Using LRT</i>
--------------	--

Description

The function creates a p-value table for multivariable Cox Proportional Hazard regression model.

Usage

```
lr.surv.pval(time, event, covariate, data)
```

Arguments

time	A variable for time to event
event	A variable for event indicator (1 indicates event, 0 is censored)
covariate	A vector of variables included in the multivariable analysis
data	A data set

Value

A matrix with variables and p values in the multivariable Cox model

Examples

```
## Not run:
library(survival)
df <- veteran
res <- lr.surv.pval(time="time", event="status",
                   covariate=c("age", "prior", "trt", "celltype", "karno", "diagtime"),
                   data=df)

## End(Not run)
```

surv.pval

A backward elimination model building in Cox regression

Description

The function builds or finalizes a multivariable Cox regression model based on a LRT p-value.

Usage

```
surv.pval(time, event, covariate, sig = 0.05, data)
```

Arguments

time	A variable for time to event
event	A variable for event indicator (1 indicates event, 0 is censored)
covariate	A vector of variables included in the multivariable analysis
sig	A significance level that allows the variable in the finalized model
data	A data set

Value

A matrix with variables and p values in the multivariable Cox model

Examples

```
## Not run:
library(survival)
df <- veteran
res <- surv.pval(time="time", event="status",
                 covariate=c("age", "prior", "trt", "celltype", "karno", "diagtime"),
                 sig=0.05, data=df)

## End(Not run)
```

Index

`lr.surv.pval`, [1](#)

`surv.pval`, [2](#)