Package 'condsurv'

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Title Conditional survival estimates and plots

Version 0.1.2

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Description This package contains functions to produce conditional survival estimates with 95% confidence intervals, and to plot Kaplan-Meier conditional survival estimates over a range of conditioned times.

Depends R (>= 3.1.0)

License GPL-2

LazyData TRUE

Imports survival, shiny, dplyr, ggplot2, purrr

RoxygenNote 6.0.1

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R topics documented:

`condKMapp` *Interactive conditional survival Shiny app*

Description

`condKMapp` produces an interactive Shiny app containing output from both the `condKMest` function and the `condKMplot` function.

Usage

```
condKMapp(.basekm)
```

Arguments

.basekm	survfit object

Value

The output includes 1) a plot with one overall Kaplan-Meier survival curve and an additional Kaplan-Meier survival curve for each time on which you are conditioning and 2) a table with conditional survival estimates at the specified survival time along with their associated confidence intervals, with one row for each time on which you are conditioning.

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condKMest *Estimate conditional survival with a 95% confidence interval*

Description

condKMest estimates the Kaplan-Meier conditional survival at fixed time points and produces a 95% confidence interval

Usage

```
condKMest(.basekm, .t1, .t2)
```

Arguments

.basekm	survfit object
.t1	the time on which to condition
.t2	the survival time to estimate

Details

For example, if .t1 = 2 and .t2 = 5, the function will return the probability of surviving to year 5 conditioned on having already survived to year 2

Value

A list where cs is the conditional survival estimate, cilow is the lower bound of the 95 cihigh is the upper bound of the 95

condKMggplot *Generate conditional survival plots using ggplot2*

Description

condKMggplot produces a Kaplan-Meier plot for a variety of times on which to condition using ggplot2

Usage

```
condKMggplot(.basekm, .at, .main = NULL, .xlab = "Years",
  .ylab = "Survival probability", .lwd = 1)
```

Arguments

.basekm	survfit object
.at	vector of times on which to condition
.main	plot title
.xlab	x-axis label
.ylab	y-axis label, defaults to "Survival probability"
.lwd	plot line width, defaults to 1

Value

A ggplot with a line for the overall Kaplan-Meier plot and one additional line for each value in .at

condKMplot *Generate conditional survival plots*

Description

condKMplot produces a Kaplan-Meier plot for a variety of times on which to condition

Usage

```
condKMplot(.basekm, .at, .main = NULL, .xlab = NULL,
  .ylab = "Survival probability", .lwd = 1, .mark = F)
```

Arguments

.basekm	survfit object
.at	vector of times on which to condition
.main	plot title
.xlab	x-axis label
.ylab	y-axis label, defaults to "Survival probability"
.lwd	plot line width, defaults to 1
.mark	controls whether censoring times are marked on curves, defaults to F

Value

A plot with a line for the overall Kaplan-Meier plot and one additional line for each value in `.at`

Index