Package 'CondiS'

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Type Package

Version 0.1.2

Title Censored Data Imputation for Direct Modeling

Description Impute the survival times for censored observations based on their conditional survival distributions derived from the Kaplan-Meier estimator. 'CondiS' can replace the censored observations with the best approximations from the statistical model, allowing for direct application of machine learning-based methods. When covariates are available, 'CondiS' is extended by incorporating the covariate information through machine learning based regression modeling ('CondiS_X'), which can further improve the imputed survival time	
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Imports caret, survival, kernlab, purrr, tidyverse, survminer	
NeedsCompilation no	
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2 CondiS_X

CondiS	CondiS Function

Description

This function allows you to impute survival time.

Usage

```
CondiS(time, status, tmax)
```

Arguments

time The follow up time for right-censored data.

status The censoring indicator, normally 0=right censored, 1=event at time.

tmax A self-defined time-of-interest point; if left undefined, then it is defaulted as the

maximum follow up time.

CondiS_X	CondiS-X Function

Description

This function allows you to improve the imputed survival time by incorporating covariate information.

Usage

```
CondiS_X(pred_time, status, covariates, method)
```

Arguments

pred_time The imputed follow up time for right-censored data.

status The censoring indicator, normally 0=right censored, 1=event at time.

covariates The additional patient data that is presumably associated with the survival time.

method Choose from 8 machine learning algorithms; the default is "glm".

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