Package ‘CondiS’

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Type Package
Title Censored Data Imputation for Direct Modeling
Version 0.1.2
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.
License GPL-2
Encoding UTF-8
Depends R (>= 3.6)
Imports caret, survival, kernlab, purrr, tidyverse, survminer
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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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