

# Cure models with pseudo-observation approaches in R

Sy Han Chiou<sup>1\*</sup>, Chien-Lin Su<sup>2</sup> and Feng-Chang Lin<sup>3</sup>

<sup>1\*</sup>Department of Mathematical Sciences, University of Texas at Dallas, 800 W. Campbell Road, Richardson, 75080, Texas, USA.

<sup>2</sup>Department, Organization, Street, City, 10587, State, Country.

<sup>1\*</sup>Department of Biostatistics, University of North Carolina, Chapel Hill, stree address, Chapel Hill, 27599, Texas, USA.

\*Corresponding author(s). E-mail(s): [schiou@utdallas.edu](mailto:schiou@utdallas.edu);

Contributing authors: [chien-lin.su@mcgill.ca](mailto:chien-lin.su@mcgill.ca);

[flin33@email.unc.edu](mailto:flin33@email.unc.edu);

## Abstract

The abstract serves both as a general introduction to the topic and as a brief, non-technical summary of the main results and their implications. Authors are advised to check the author instructions for the journal they are submitting to for word limits and if structural elements like subheadings, citations, or equations are permitted.

**Keywords:** bounded cumulative hazard, generalized estimating equation, mixture cure model, penalized regression

## 1 Introduction

Package **pseudoCure** function **pCure**

```
> library(pseudoCure)
> args(pCure)
## function (formula1, formula2, time, status, data, subset, t0,
##     model = c("mixture", "promotion"), nfolds = 5, lambda1 = NULL,
##     exclude1 = NULL, penalty1 = c("scad", "lasso"), lambda2 = NULL,
##     exclude2 = NULL, penalty2 = c("scad", "lasso"), control = list())
## NULL
```