

# JMcmprsk: An R Package for Joint Modelling of Longitudinal and Survival Data with Competing Risks

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**Abstract** In this paper, we describe an R package named JMcmprsk, for joint modelling of longitudinal and survival data with competing risks. The package in its current version implements two joint models of longitudinal and survival data proposed to handle competing risks survival data together with continuous and ordinal longitudinal outcomes respectively (Elashoff et al., 2008; Li et al., 2010). The corresponding R implementations are further illustrated with real examples. The package also provides simulation functions to simulate datasets for joint modelling with continuous or ordinal outcomes under the competing risks scenario, which provide useful tools to validate and evaluate new joint modelling methods.

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