

Other Vignettes

Terry Therneau

January 12, 2026

Many of the vignettes have been moved to a separate `survivalVignettes` package. There are two primary reasons. One is that the survival package is becoming physically large, and it was useful to split these off for maintainance purposes. (The package is already an exception to CRAN policies on maximal size.) A second is that as a recommended package survival cannot depend on any packages outside of base + recommended. (A minimally sufficient set that is self contained is important for R maintainance and validation.) This means that we cannot use more modern tools such as `knitr` or `markdown`, refer to other packages such as `mstate` or `ggsurvfit`, nor use data from some of those packages in our examples.

The following vignettes are found in this other location

1. `external`: A long discussion and examples focused on the external validation of a survival model.
2. `pseudo`: Use of pseudovalues and the pseudo function.
3. `ridge`: Addresses a recurrent question wrt using the `ridge()` function with a large number of covariates.
4. `royston`: A small note that describes the data sets used in an excellent paper on validation, and how those data were incorporated into the survival package. (Royston and Altman, doi:10.1186/1471-2288-13-33)
5. `tutorial`: This works through the examples found in the excellent tutorial by H. Putter, M. Fiocco and R. Geskus, Tutorial in biostatistics: competing risks and multi-state models, Statistics in Medicine, 2006 (doi:10.1002/sim.2712).
6. `sas`: An expanded discussion answering some repeated queries about how survival package results differ from SAS. Some of these computations take a very long time to run.
7. `shared`: Use of shared coefficients and/or shared baseline hazards in multistate models.

Over time, we expect more vignettes to transfer from the survival package, and new ones to be written and added.