

# Description of Simulation Study Results

## RData File in Munko et al. (2025) for $\delta = 1.3$

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This Dataset contains the detailed results from the simulation study of the main paper for the scenario  $\delta = 1.3$ , and therefore does not contain results of the RMST-based methods. A detailed description of the simulation setup is given in Section 4.2 of the main paper. Each row of the dataset represents one simulation setup.

- Columns 1-3 contain the true values for the estimands, on which the decision whether a confidence interval contains the estimand is based upon. The parameters have been estimated (setting wise) from a large dataset of uncensored observations.
- Columns 4-9 contain the estimated coverage probabilities for the RTE. If the name contains "gauss", the confidence intervals have been computed based on a normal distribution. If the name ends with perm, the (random) quantiles from the randomization procedure have been used. The names containing "lower", are the left sided intervals, of which the randomization versions are contained in the main paper. Analogously the columns with names containing "upper" and "twoside", contain the estimated coverage probabilities for right- and two-sided intervals. This naming convention also applies to the other methods.
- Columns 10-15 contain the results for the Midrank method. If the column name contains "binom", the exact Clopper-Pearson interval was used. If the column name contains "wald", the Wald interval for binomial probabilities was used.
- Columns 16-18 contain the estimated coverage probabilities for the Kaplan-Meier method. Here the confidence interval is based on the complementary log-log transformation and standard normal quantiles.
- Column 19 contains the estimated censoring probability for the second event time (the first event time is always uncensored).
- Columns 20-27 contain the input parameters of the simulation.

**Reference:** M. Munko, S. Mack, M. Ditzhaus, S. Fröhling, D. Dobler, D. Edelman (2025). Effect measures for comparing paired event times. *Preprint*.