

# R Code from Chapter 8: Small Sample Methods

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This directory contains some of the R code used to produce the figures and analyses of the chapter “Small Sample Methods” in the book “Handbook of Statistical Methods for Case-Control Studies” published by Chapman and Hall.

There are four R scripts with the following correspondences to sections of the chapter:

1. `intro.R` for Section 8.1: Introduction
2. `exactInf.R` for Section 8.2: Exact Conditional Inference
3. `approxExact.R` for Section 8.3: Approximate Exact Conditional Inference
4. `penalized.R` for Section 8.5: Bias-reduced and Other Penalized Likelihood Approaches.

The R scripts read data from the **Data** directory and functions from the **Functions** directory. Figures generated by the R scripts are saved in the **Figures** directory. The scripts rely on the following R packages:

- `survival`
- `logistf`
- `nleqslv`
- `coxphf`
- `xtable`
- `elrm`

You can install all of these with the following:

```
install.packages(c("survival", "logistf", "nleqslv", "coxphf", "xtable", "elrm"))
```