

# **Power & Sample Size Calculation Reference list**

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#### Books

- Sample Size Tables for Clinical Studies. David Machin: https://catalog.library.cornell.edu/catalog/12127404
- Statistical Rules of Thumb Chapter 2. Gerald Van Belle. http://www.vanbelle.org/chapters/webchapter2.pdf
- Sample Size Determination in Clinical Trials with Multiple Endpoints. Takashi Sozu. https://catalog.library.cornell.edu/catalog/11969555

### Articles

- Selecting a sample size for studies with repeated measures. Yi Guo: https://bmcmedresmethodol.biomedcentral.com/articles/10.1186/1471-2288-13-100
- Sample Size Considerations for Multiple Comparison Procedures in ANOVA. Gordon Brooks: https://digitalcommons.wayne.edu/jmasm/vol10/iss1/10/

#### Lectures

- Sample size in adaptive clinical designs https://newcatalog.library.cornell.edu/catalog/10299679
- Introduction to flexible, adaptive trial design https://newcatalog.library.cornell.edu/catalog/7069151

## Calculators

- Most statistical software packages have capabilities to address most commonly encountered sample size and power calculations:
  - SAS: proc power and proc glmpower
    https://documentation.sas.com/doc/en/statug/15.2/statug\_power\_overview.htm
    https://documentation.sas.com/doc/en/statug/15.2/statug\_glmpower\_overview.htm
  - R: power package, https://cran.r-project.org/web/packages/pwr/vignettes/pwrvignette.html
  - Stata: power command, https://www.stata.com/manuals13/pss.pdf
  - JMP: under DOE> Design Diagnostics, https://www.jmp.com/support/help/14/power-analysis-3.shtml

- Other options available for free on the web:
  - G\*Power. An easy to use free software for power analyses that can be used for ttests, ANOVA, correlation, regression, and proportions. See http://www.gpower.hhu.de/
  - Online Sample Size Calculators for Designing Clinical Research: http://www.sample-size.net/
  - PANGEA- Power analysis for general ANOVA designs. Can handle multifactor ANOVA designs with random effects: https://jakewestfall.shinyapps.io/pangea/
  - Monte Carlo Power Analysis for Indirect Effects (mediation). Can estimate power for a one mediator or two mediator model: https://schoemanna.shinyapps.io/mc\_power\_med/

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